

PERSONAL INFORMATION

Deborah PANEPINTO



 POLITECNICO DI TORINO, Corso Duca degli Abruzzi 24, 10129, Torino, Italy



Se:

ORCID:

Scopus Author ID:

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SSN: CA

WORK EXPERIENCE

Since December 2018 – Associate Professor in Environmental Engineering for **Politecnico di Torino - Department DIATI** (Department of Engineering for Environment, Land and Infrastructures)

From December 2015 to December 2018 – Assistant Professor with time contract (Law 240/10, art. 24-B) for **Politecnico di Torino - Department DIATI** (Department of Engineering for Environment, Land and Infrastructures)

Main activity:

Research project developed between Politecnico di Torino and SMAT SpA (Turin Metropolitan Water Society) concerning the analysis of the effects of diffuse and local point loads on the quality of the Po River

Research project developed between Politecnico di Torino and SMAT SpA (Turin Metropolitan Water Society) concerning the wastewater treatment plant energetic optimization

Research project developed between Politecnico di Torino and SMAT SpA (Turin Metropolitan Water Society) concerning the analysis and implementation of a modeling system for the atmospheric dispersion of odorous effluents

Research project developed between Politecnico di Torino and IREN Energia concerning an evaluation of the consequences in terms of air quality of a cogenerative district heating system (in particular, analysis of a Turin case study)

Research project developed between Politecnico di Torino and IREN Energia concerning an 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 and Vercelli

Consultancy developed between the Politecnico di Torino and Lavazza SpA concerning the energetic and environmental evaluation of two different treatment systems for coffee waste: combustion and anaerobic digestion

Consultancy developed between the Politecnico di Torino and Lavazza SpA concerning the biomass characterization (waste from coffee production) and evaluation of methane production

Consultancy developed between the Politecnico di Torino and Ecosavona SpA concerning the study of the effect of biodegradable organic substances present in non-hazardous waste on the environmental performance of the Ecosavona srl landfill

Member of the Operative Unit of the Project MIUR - POR FESR 2014/2020 "Green factory for composites - Green factory 4compo"

Member of the Operative Unit of a research project developed between the Politecnico di Torino and FCA (Fiat

Chrysler Automotive) concerning the circular economy for recovery and recycling of automobile materials

Research project development between Politecnico di Torino and SMAT SpA (Turin Metropolitan Water Society) concerning technical and economic evaluation of the application of technologies for struvite production in a wastewater treatment plant

Consultancy developed between the Politecnico di Torino and the Novara Province concerning the examination of the practices and documentation of the Momo paper mill

From March 2013 to December 2015 – Research Fellow (Law 240/2010) for **Politecnico di Torino** - Department DIATI (Department of Engineering for Environment, Land and Infrastructures)

Main activity:

Consultancy developed between the Politecnico di Torino and TEA srl (Trends Explores Associated) concerning the implementation of a training course for IREN in the field of waste management

Participation in the technical consultancy development (Politecnico di Torino CTU - Office Technical Consultant) concerning the verification of the question submitted with the sentence 2538/12 from the Consiglio di Stato for the petition n. 7675/11, n. 8817/11 and n. 9062/11 presented from Comune di Roma, ARPA Lazio and association Codici - Centro, Codici - Lazio, Codici - Ambiente against the society E. Giovi srl (object: Malagrotta landfill), scientific supervisor: prof. Giuseppe Genon, prof.ssa Mariachiara Zanetti, prof. Rajandrea Sethi;

Participation in the technical consultancy development (prof. Genon G. as CTU - Office Technical Consultant) in the verification (ex art 696 CPC) between La Torre – Società Cooperativa Agricola Zootecnica S.c.a.r.l. and Biogas Impianti srl (now Biogreen SpA) concerning the realization of an anaerobic digestion plant for biogas production and energy cogeneration;

Research project between Politecnico di Torino and Skylab Power srl concerning sludge treatment research

Research project development between Politecnico di Torino and SMAT SpA (Turin Metropolitan Water Society) concerning the optimization of the Rosta wastewater treatment plant

Participation in the technical consultancy development (prof. Genon G. as CTU - Office Technical Consultant) concerning the verification between Agrienergia Pietrarossa Soc. Agricola r.l. and Archea Italia s.r.l. i.l. for an evaluation of an anaerobic digestion plant realization;

Consultancy development between Politecnico di Torino and Comune di Rivarolo concerning an evaluation of the environmental compatibility of a biomass plant located in Rivarolo

Collaboration in the coordination of an urban waste management training course (UPI / ANCI Master). Master Supervisor: prof. Genon G.;

Participation in the technical consultancy development (Politecnico di Torino CTU - Office Technical Consultant) concerning verification of the procedure of TAR Piemonte n. 552/15 on the safety of the landfill located in the province of Biella.

From March 2008 to February 2013 – Research Fellow (Law 449/1997) for **Politecnico di Torino** - Department DIATI (Department of Engineering for Environment, Land and Infrastructures)

Main activity:

Consultancy development between Politecnico di Torino and Comune di Mondovì concerning an evaluation of the environmental compatibility of a biomass plant

Research project developed among Politecnico di Torino, ATO – R (Turin association for waste management) and Barricalla concerning the evaluation of bottom ash (derived from incineration plants) recovery and reuse

Consultancy development between Politecnico di Torino and ACEA Pinerolese Industriale SpA concerning an evaluation of a conventional and innovative energetic production plant from biomass into the structure present in Pinerolo

Consultancy development between Politecnico di Torino and ATO-R (Turin association for waste management) concerning verification of mechanical-biological treatment applicability in the integrated cycle of municipal waste in the province of Torino

Tutoring role in a project for the realization of an advanced seminar on the theme "Sanitation in Sub-saharan Countries: the fundamental role of education", co-funded by the Ministry of Foreign Affairs, for a commitment of 50 hours;

Research project development between Politecnico di Torino and SMAT SpA (Turin Metropolitan Water Society) concerning wastewater sewage sludge management

Research project development between Politecnico di Torino and Comune di Voltaggio concerning an evaluation of the environmental compatibility of a biomass plant

Consultancy development between Politecnico di Torino and the society STR (Waste Treatment Society) concerning a feasibility study for a new type of RDF production known as "Carbon Verde (Green Carbon)"

Research project developed between Politecnico di Torino and BIOLAND srl concerning a preliminary analysis for a construction of a sewage sludge gasification plant

Research project development between Politecnico di Torino and SMAT SpA (Turin Metropolitan Water Society) concerning an experiment on the use of sinks under washbasins

Consultancy development with the society STR (Waste Treatment Society) in the execution of an operational test related to a rocket plant for the production of "Carbon Verde (Green Carbon)"

Collaboration through an internship with TRM in the drafting of a work aimed at comparing two different energetic configurations (electricity only and cogeneration) for the Turin waste-to-energy plant. Analyses from energy, environmental, and economic points of view

Collaboration with IREN in the drafting of the amendments to the Integrated Environmental Authorization (AIA) for the Turin incineration plant

From June 2010 to September 2010 – Technical Assistant for **ATO – R** (Turin association for waste management)

Main activity:

Technical support in order to verify the applicability of biological mechanical treatments in the integrated cycle of urban waste in the Province of Turin

From June 2009 to August 2009 – Technical Assistant for **Politecnico di Torino** - Department DIATI (Department of Engineering for Environment, Land and Infrastructures)

Main activity:

Research activities development in the context of a collaboration between the Politecnico di Torino and the Province of Turin for the performance of work concerning the realization of a standardized procedure for a pre-evaluation of the IED Instance

From July 2006 to February 2008 – Research Fellow for **Politecnico di Torino** - Department DIATI (Department of Engineering for Environment, Land and Infrastructures)

Main activity:

Research activity collaboration between Politecnico di Torino and Valle d'Aosta Region in order to conduct a study concerning MSW management with a thermal treatment solution

Research activity collaboration between Politecnico di Torino and the Piedmont Region in order to analyze the MSW incineration technology state of the art and environmental aspects

EDUCATION AND TRAINING

2002 – Politecnico of Torino (Italy)

Diploma in Environmental Engineering

Thesis title: Interpretazione approssimata di dati sismici di onde superficiali per la pianificazione di perforazioni Trenchless

Mark: 102/110

2003 – Politecnico of Torino (Italy)

Bachelor's Degree in Environmental Engineering

Thesis title: Un software per l'interpretazione di prove SWM basato su curve campione

Mark: 102/110

2006 – Politecnico of Torino (Italy)

Master Degree in Environmental Engineering

Thesis title: Studio della qualità delle acque del fiume Po nel tratto Moncalieri – San Mauro

Mark: 110 L/110

2012 – Politecnico of Torino (Italy)

PhD (XXIV Cycle, from January 2009 to December 2011) in Environmental Engineering

Thesis title: Analisi analitico sperimentale dei trattamenti termici tradizionali e innovativi per diverse matrici solide

Mark: Excellent

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
IELTS 5,5					

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Organisational / managerial skills

Since December 2015 has been an Effective Member of the Environmental Engineering Professor College (Collegio dei docenti) (CL007)- Politecnico di Torino;

Since 2017 has been the Referee for curricular and post – degree internships (Bachelor's Degree and Masters Degree) of the DIATI Department (Department of Engineering for Environment, Land and Infrastructures) of the Politecnico di Torino;

From February 2018 to January 2021 Council member of the GITISA (Gruppo Italiano di Ingegneria Sanitaria Ambientale);

Since September 2024 Council member of the DIATI Department

Since February 2024 Vice Coordinator Academic Board – PhD in Civil and Environmental Engineering

Computer skills

Good command of Office, numerical modeling software, MATLAB.

ADDITIONAL INFORMATION

Editorial Activity

Editor and Reviewer for the following journal:
Clean Technologies and Environmental Policy
Sustainability
Resources
Processes
International Journal of Environmental Research and Public health

Top 10 cited Publications

- Evaluation of the energy efficiency of a large wastewater treatment plant in Italy
Panepinto, D., Fiore, S., Zappone, M., Genon, G., Meucci, L.
Applied Energy, 2016, 161, pp. 404–411
- Environmental Performances and Energy Efficiency for MSW Gasification Treatment
Panepinto, D., Tedesco, V., Brizio, E., Genon, G.
Waste and Biomass Valorization, 2015, 6(1), pp. 123–135
- Municipal solid waste incineration plant: A multi-step approach to the evaluation of an energy-recovery configuration
Panepinto, D., Zanetti, M.C.
Waste Management, 2018, 73, pp. 332–341
- Economic and environmental comparison between two scenarios of waste management: MBT vs thermal treatment
Panepinto, D., Blengini, G.A., Genon, G.
Resources, Conservation and Recycling, 2015, 97, pp. 16–23
- Optimization of the wastewater treatment plant: From energy saving to environmental impact mitigation
Borzooei, S., Campo, G., Cerutti, A., ...Scibilia, G., Zanetti, M.
Science of the Total Environment, 2019, 691, pp. 1182–1189
- Towards circular economy: Evaluation of sewage sludge biogas solutions
Kiselev, A., Magaril, E., Magaril, R., ...Ravina, M., Zanetti, M.C.
Resources, 2019, 8(2), 91
- Data scarcity in modelling and simulation of a large-scale WWTP: Stop sign or a challenge
Borzooei, S., Amerlinck, Y., Abolfathi, S., ...Meucci, L., Zanetti, M.C.
Journal of Water Process Engineering, 2019, 28, pp. 10–20
- Analysis of the extrusion as a pretreatment for the anaerobic digestion process
Panepinto, D., Genon, G.
Industrial Crops and Products, 2016, 83, pp. 206–212
- Thermal valorization of sewer sludge: Perspectives for large wastewater treatment plants
Panepinto, D., Fiore, S., Genon, G., Acri, M.
Journal of Cleaner Production, 2016, 137, pp. 1323–1329
- Atmospheric pollutants and air quality effects: Limitation costs and environmental advantages (a cost-benefit approach)
Panepinto, D., Brizio, E., Genon, G.
Clean Technologies and Environmental Policy, 2014, 16(8), pp. 1805–1813
- Total number of publications in peer-review journals: 88
Total number of citations: 1434
H index (Scopus): 20

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Torino, 26/04/2024

Prof. Ing. Deborah Panepinto