

Prof.ssa Elena Comino

Personal

Born in Torino, 19 Maggio 1968

Italian Citizen

Children: Anna, Pietro e Alberto

Current position: Associate Professor at Politecnico di Torino



https://didattica.polito.it/pls/portal30/sviluppo.scheda_pers_sw.as.show?m=2590

<https://www.scopus.com/authid/detail.uri?authorId=35253666100>

On request any detailed information at elena.comino@polito.it

Short CV for external

Elena Comino is Professor of Applied Ecology at Politecnico di Torino - Environmental, Territory and Infrastructure Engineering Department. After a scientific high School she obtained a Biology Degree cum Laude, a PhD in Geological and Environment Engineering and a Master in Environmental Engineering, developing a particular interest on the integration of phytotechnologies in strategies and programs for the sustainable development. She teaches the courses of Applied Ecology addressed to the students in Environmental Engineering and of Environmental Sustainability Procedure. She is responsible for the Laboratory in Applied Ecology and most of her work is now oriented in the fields of phytoremediation and environmental sustainability. She coordinates an interdisciplinary team group, technical specialists, young researchers and graduate students. She was visiting professor at The Melbourne University (Australia), EPFL (Lausanne), USP (Universidade de Sao Paulo Brasile). She is Professor in Turin Tashkent Politechnica Universitate (Uz).

She supervised and co-tutored Thesis, Master Thesis and PhD Thesis, with projects focused on restoration, land conservation, bioremediation and new phytotechnologies.

She authored over 80 publications, of Nationals and Internationals relevance and she participates several Conference as invited speaker, chairman and presenter.

She is scientific and economic responsible of national and international projects. Recently she focused all these studies also on the social and planning aspects.

Member of: Ecology Italian Society (SItE), Wetland Scientist Society (SWS), International Phytotechnology Society (IPS).

Short CV message for students and young researcher:

"...After 25 years of experience in the field of Environment, I am focused to drive the Environmental Engineers students to fill the gap between biology (the science of the life) and technology. I teach them the Fundamentals of Ecology, useful to build the bridge between nature, society and technology. I strongly believe in cultural relationships with the students, I work with and for them; I try to lead them to find out their own scientific-technical passions and interest. I am now responsible for the student Team AKaNoah in Politecnico di Torino,, 36 students working on Re-Thinking a boat for plastic collection and environmental recovery"

https://drive.google.com/file/d/1hHxZPbnMh4_nZj7pWe8opwDdtyNNTdt/view?usp=sharing

Thanks to the great opportunity and experience I have done in my carrier, thank to the colleagues, students and friends that I meet around the world, now I want to share my scientific knowledge and experience in the field of phytotechnology, teaching how we can apply plants properties to improve the technology. I developed researches in the field of phytoremediation, for soil, water and air, in Nature Based Solution application. The key point of all my research and studies is the human wellbeing. And I dream to work on it with the technological support. This is what I teach to the young researchers. I have been working and teaching from kids to the university students and trained them to be more conscious and responsible because our action can modify our ecosystem”.

https://drive.google.com/file/d/1zU_oCrTWPnIQOWqYxlXVraWqQz1VSLJz/view?usp=sharing

<https://drive.google.com/file/d/130e2Qm39K0hm2ltNUh1gqd60JbOLZ7jV/view?usp=sharing>

My Education

PhD in Environmental Geological Engineering, Polytechnic of Turin 1992–1996

Experimental Thesis on the *Interactions between magnetic fields and vegetal organisms (Seeds germination)*

M. Sc., Environmental Analysis/Management, Polytechnic of Turin, 1991 - 1992.

Experimental Thesis on *the Extraction of organic pollutants from river mosses*

Degree in Biology, Specialization in Chemistry – Ecology University of Turin Italy, 1987 - 1991.

Experimental Thesis on *the Extraction of allergenic substances from pollens*

Scientific High School

My Research and Teaching

I am mixing my skill in research, in teaching in communicate to develop teaching curricula focused on learning from nature by connecting thinking and doing.

Being trained in natural and engineering sciences, I am used to work with quantitative and qualitative methods, as well as with engineering and prototype methods, by thinking and doing.

1993 to date **Environmental Ecology** in the field of Phytotechnologies: Phytoremediation, Ecological Restoration, sustainable land use and resources, systemic approach.

Areas and Key words of my main research

Applied Ecology

Ecological Landscape

Environmental Engineering

Interdisciplinary

Nature Based Solution

Vulnerability assessment

Teaching is part where I see myself as a coach.

https://drive.google.com/file/d/1e9aNeUXN4Qk_mC-ixnRaRR9Gmo6zIHBR/view?usp=sharing

In 25 years of teaching activities I have been

- *Professor in Ecology Applied to Engineering, in Environmental Engineering Degree (both 3 and 5 years degrees);*

- *Professor in Environmental Sustainability Procedure in Systemic Design Degree;*
 - *Professor in Environmental and Ecotoxicological Indicators, in Environmental Engineering degree;*
 - *Professor of Ecosystem Ecological and Management conservation, in Environmental Engineering degree;*
 - *Lecturer of the National remote education course in Ecology of the degree in Geographical Information Systems;*
 - *Lecturer in the Master in Environmental Engineering; Corep, Polytechnic of Turin.*
 - *Invited Lecture in National and International Workshop*
 - *Invited Speaker in National and International Congress*
- 2001 *Visiting professor and researcher at The Melbourne University (Botany Department and Environmental Department, Prof. Alan Baker)*
- 2009 *Visiting professor at EPFL (Lausanne) (Laboratory for Environmental Biotechnology, Prof. Jean Paul Schwitzguebel)*
- 2010 *Visiting Professor at USP (Iniversitade de Sao Paulo Brasile) (Dept. Environmental and Sanitary Engineering) Prof. Carlos Mierzwa*

Accademic Activities – Strategic Interest

I am interested in working on wellbeing-environment relations and the transition to a sustainable society taking into account the technological aspects.

- Member of COST ACTION FA 0905 “*Mineral-improved Crop Production for Healthy Food and Feed*“
- Member of COST ACTION 859 “*Phytotechnologies to promote sustainable land use and improve food safety*”
- Member of the Polytechnic Committee for International Student Exchange;
- Member of: Italian Society in Ecology (SIteE),
- Member of Society of Wetland Scientist (SWS),
- Member of International Phytotechnology Society (IPS),
- Representing on the European Module Project “Engineering in the face of challenges of globalization and sustainability”,
- Accademic collaboration with the University Departments of: Chemistry, Phisic, Electronic, Agricultural and Forestry.
- Accademic cooperation with International University (Ecole Polithecniquè Federal de Losanna, Institute of Chemical Technologie Prague, Università Autonoma de Barcellona, Università de Sciences et Technologies de Lille, University of Greenwich, Finnish Environment Institute, Helsinki, Universitatae Polithecnicca de Bucuresti, Universitade de Badajoz,

Cooperation with Engineering without frontier (ISF) (Politecnico di Torino).
Comitato Collaborazione Medica (CCM)

Relevants Projects– and Professional Activities

Responsible for the Project :

L’influenza dell’apparato radicale nel contenimento di dissesti superficiali in aree montane. Fondi regionali (2006-2008)

Programma generale di gestione dei sedimenti per i corsi d’acqua piemontesi fondi AIPO (2007-2009)

BET Bioenergy performance studies of biomass wastes in anaerobic digestion. Fondi regionali (2007-2010)

PelliDrac: Pellice e Drac si parlano, histoire d'eau - ALCOTRA ITALIA-FRANCIA 2007-2013

TTCoCo : Torrenti Transfrontalieri Conoscenza e Comunicazione- ALCOTRA ITALIA-FRANCIA 2013-2015

ALPéril: Allerta dei pericoli nei bacini alpini- ALCOTRA ITALIA-FRANCIA 2015-2016

Partner in the Project

RUROTEC. Best Waste water treatment technology for cheese factory in rural areas. INTERREG III A, (2007-2008)

PROBIO. International Project on Biogas production (2007-2010).

AIGAENRG. Microalgal cultivation systems for CO2 fixation and energy enhancement.

WIN STREET WaterIN: STReet design with Environmetal Engineering Technologies for Urbanized areas.

FIUM-POLI: Knowing the river by playing.

ProGIReg. Productive Green Infrastructure for post-industrial urban regeneration. (Horizon 2020- 2018/23)

OH- One Health (2018/2021)

Reviewer for:

Ecological Engineering, Ecological Indicators, Bioresource and Technology, Journal of Ecological Management, Environmental Science and Research Pollution, Soil and Foundation, Land Use and Policy

Languages

Italian, English, French