

PERSONAL INFORMATION Alessandro Girelli

CURRENT POSITION Managing Partner of I.A. Industria Ambiente S.r.l. and Studio Munari Girelli e Associati

PROFESSIONAL EXPERIENCE

Date	Academic Year 2024-2025
Employer	Università di Genova
Sector	Teaching
Position	Contract Professor
Main duties and responsibilities	Course "Wastewater Treatment"

Date	2017 to present
Employer	Interprovincial Order of Chemists and Physicists of Liguria
Sector	Professional Order
Position	President of the Order
Main duties and responsibilities	Coordination and management of the professional Order and relationships with members and institutions

Date	2009 to 2017
Employer	Interprovincial Order of Chemists and Physicists of Liguria
Sector	Professional Order
Position	Order Councilor
Main duties and responsibilities	Responsible for Professional Education, relationship with members, etc.

Date	2006 to present
Employer	Studio Munari Girelli e Associati - Genova
Sector	Professional consultancy firm in ecological and environmental field
Position	(Founding Partner) - Freelance professional, environmental consultant
Main duties and responsibilities	Technical-legal consultancies as Technical Consultant for Parties or Court-appointed / Consultancies regarding issues in the field of industrial chemistry, ecology and environment..

Date	1999 to present
Employer	I.A. Industria Ambiente Sr.l. - Genova
Sector	Consultancy company in ecological and environmental field
Position	(Founding Partner and Administrator) - Freelance professional, environmental consultant
Main duties and responsibilities	Design of environmental characterization interventions, risk analysis and remediation of contaminated sites. Environmental modeling in the field of water treatment, risk analysis, atmospheric contaminant dispersion, etc. Environmental impact studies. Consultancies regarding environmental pollution issues: contamination mechanisms in soil and water, environmental characterization and remediation strategies, wastewater treatment processes, atmospheric pollution

EDUCATION AND TRAINING

Date	from 1989 to 1996
Institution:	University of Genoa - Faculty of Industrial Chemistry
Main subjects/professional skills:	Industrial chemistry, Chemical plants, Petroleum and polymer chemistry, Inorganic and Organic chemistry
Qualification obtained:	Degree in Industrial Chemistry, obtained with grade 110/110

• National classification level:

Date	from 1984 to 1989
Institution:	G.D. Cassini Scientific High School
Main subjects/professional skills:	Mathematics, Physics, Chemistry, Italian, History, Philosophy, German
Qualification obtained:	Scientific high school diploma
• National classification level:	Five-year diploma

PERSONAL SKILLS

Mother tongue: Italian

Other languages

	COMPREHENSION		SPOKEN		WRITTEN PRODUCTION
	Listening	Reading	Interaction	Oral Production	
Inglese	C2	C2	C2	C2	C1
Tedesco	B1	B1	B1	B1	B1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
Common European Framework of Reference for Languages

Communication Skills

- The consultancy activity has involved the need to develop very high relational skills to manage relationships with clients (often not experts in the field) and with public bodies (both technical and administrative). The same skills were developed during the experience as councilor and president of the Interprovincial Order of Chemists and Physicists of Liguria.

Organizational and Management Skills

- Environmental consultancy activity is almost always multidisciplinary and therefore involves the need to interface with other professionals (as well as with public administrations) for the development of complete and detailed projects, as well as organizational capacity to manage all technical and administrative requirements.

Professional Skills (divided by topic)

Soil and Groundwater Pollution

- Groundwater contaminant diffusion modeling, remediation technologies, Risk Analysis, etc.
- Characterization plans and Design/Construction Management of contaminated site remediation interventions oriented to identifying the best solutions in terms of effectiveness/intervention costs, applied to multiple types of contaminated sites, including those of national interest (S.I.N.)
- Development of Risk Analysis according to nationally and internationally recognized standards, for simple and complex cases, including non-conventional exposure pathways
- Technical consultancies (Environmental Due Diligence) concerning the evaluation of environmental liabilities or impacts of plants and/or areas subject to sale
- Technical consultancies related to pollution and/or environmental contamination phenomena of refineries and petroleum product depots, tar distilleries, ferrous and non-ferrous metal production and processing, dismissed industrial areas, landfill or contaminated sites, waste management and raw material recovery
- Consultancies on sediment and surface water pollution, including distribution and partitioning mechanisms of contaminants in the different affected matrices
- Consultancy on excavation material and/or waste management

Atmospheric Pollution

- Mathematical modeling regarding the diffusion of pollutants and/or odors in the atmosphere (CALPUFF, ISC3, AERMOD, CALINE4, ALHOA + MARPLOT, etc.) from point sources (chimneys, plants, etc.), areal, linear, etc. and from diffuse sources (traffic) and related Technical Reports

Environmental permitting (AUA, AIA, EIA screening verifications, Environmental Impact Assessments, etc. Health Impact Assessments - HIA)

- Development of technical documents in the context of Environmental Impact Assessments or for obtaining Environmental Authorizations (AUA, AIA, PAUR, etc.)

Wastewater Treatment Plants

- Preliminary design and sizing of industrial and/or civil wastewater treatment plants, first rain water (development of an MS Excel model for sizing civil wastewater treatment plants)
- Consultancies and verifications on efficiency/optimization of existing treatment processes, including calculation of residual capacity of civil wastewater treatment plants aimed at feasibility of new connections
- Development of technical documents for obtaining Environmental Authorizations

REACH

- Consultancy and assistance in defining exposure scenarios in work environments and/or in verifying compliance with what indicated in extended safety data sheets, in Chemical Safety Assessment (CSA) and in preparation of Chemical Safety Report (CSR)
- Risk calculation towards workers, consumers and environment using the ECETOC TRA mathematical model in its latest version and development of related technical documents

Environmental Mathematical Modeling

- Development and/or use of mathematical models for describing environmental phenomena and estimating contamination transport from sources to specific targets, as well as for risk analysis applied to contaminated sites and landfills
- Development of mathematical model for sizing civil wastewater treatment plants
- Development of mathematical model for Risk Analysis (co-author of RISKNET 3.x software together with Eng. Iason Verginelli)

Specific Problems

- Consultancies on issues related to the presence of contaminants in natural background, potential presence of war ordnance in the subsoil, environmental due diligence, etc.

Professional activity, on behalf of primary companies operating in energy production, petroleum product refining, construction and infrastructure, steel production, chemical and pharmaceutical, is also carried out as Technical Consultant (court-appointed or party-appointed) in the context of judicial disputes and/or arbitrations related to environmental and plant engineering issues.

Digital skills

SELF-ASSESSMENT				
Information Processing	Communication	Content Creation	Security	Problem Solving
Advanced	Advanced	Advanced	Advanced	Advanced

*Levels: Basic user - Intermediate user - Advanced user
Digital Skills - Self-assessment form*

Software Knowledge and Use

- Excellent knowledge of MS Windows / Linux / Mac OSX operating systems
- Excellent knowledge of MS Office packages (with VBA programming capabilities), LibreOffice, OpenOffice
- Excellent knowledge of software for three-dimensional interpolations, thematic map processing and georeferencing with GIS systems (Surfer, MapInfo, QGIS)
- Excellent knowledge of the following mathematical models:
 - Caline4 (emissions and atmospheric diffusion of contaminants from mobile sources - traffic)
 - CalRoads View (emissions and atmospheric diffusion of contaminants from mobile sources - traffic based on Caline 4, CAL3QHC and CAL3QHCR)
 - CALPUFF (emissions and atmospheric diffusion of contaminants from different types of sources)
 - ISC3 -AERMOD (emissions and atmospheric diffusion of contaminants from different types of sources)
 - ALHOA + MARPLOT (emissions and atmospheric diffusion of contaminants from fixed point sources)
 - WHEAM (two-dimensional modeling of groundwater hydrodynamics)

- GIUDITTA / ROME / RBCA Toolkit / RISC / Risknet (Risk analysis models based on US EPA / ASTM (RBCA) / CONCAWE '97 standards)
- ECETOC TRA (Risk analysis models in work environments (REACH Regulation))
- Statistical data processing, Multivariate Analysis, Design of Experiment using CAT and RStudio (based on R)
- Data processing in any format of origin
- Photo retouching and vector drawing
- Three-dimensional graphics with Blender
- Fair knowledge of JAVA, Visual Basic, Javascript, HTML, CSS and Python

Mathematical Model Development

- Development and implementation together with Eng. Iason Verginelli of the multiplatform mathematical model Risknet 3.0, for risk analysis from conventional pathways based on national and international standards
- Development and implementation of mathematical models in MS Excel for risk analysis from non-conventional pathways (irrigation water, bioaccumulation from plant and animal ingestion, etc.) based on US EPA and RAIS (Risk Assessment Information System) algorithms
- Development and implementation of a mathematical model in MS Excel for sizing different compartments of a civil wastewater treatment plant and for estimating management costs

Other Skills

- Photography (with semi-professional reflex) and Raw photo development with specific software (Canon DPP, RawTherapee, Snapseed, etc.)
- Photo retouching and vector drawing (AutoCad, Photoshop, Gimp, etc.)
- Three-dimensional graphics (Blender)
- Drawing (preferably in ink and black and white)
- Manual activities: Woodworking, Origami
- Music: Piano, guitar, flute, harmonica
- Archery, bicycle, hiking, tennis, ping pong, skating, skiing, TaeKwonDo, karate, etc.

Driving License Type A and B license

ADDITIONAL INFORMATION

Presentations, Conferences, Seminars, Courses

2024	Speaker at REMTECH 2024 in Ferrara, with presentation "The role of chemists in contaminated site remediation: a necessary competence."
2024	Lecturer in the Course "ADVANCED TRAINING SCHOOL ON CONTAMINATED SITE REMEDIATION" held in ROME within the "Fare i conti con l'ambiente" initiative, with presentation "The issue of Fill Materials - regulatory evolution and Guidelines on fills".
2024	Introductory presentation and moderation of the Round Table on "PREVENTION, ENVIRONMENTAL MONITORING AND CONTROLS FOR HEALTH PROTECTION", on the occasion of the National Day of Chemists and Physicists
2019-2025	Lecturer in the 2nd level University Master's in "CHARACTERIZATION AND TECHNOLOGIES FOR CONTAMINATED SITE REMEDIATION" at the Faculty of Mathematical, Physical and Natural Sciences and the Department of Chemistry of the University of Rome "La Sapienza", with presentation on the application of Risknet 3.1 software for Risk Analysis and fill material remediation.
2022-2025	Lecturer in the Course "CONTAMINATED SITE REMEDIATION" (organized for IREN), with presentation "The contaminated site remediation procedure - Regulations and established practices".
2022-2023	Lecturer in the Course "ADVANCED TRAINING SCHOOL ON CONTAMINATED SITE REMEDIATION" held in Ravenna within the "Fare i conti con l'ambiente" initiative, with presentation "The issue of Fill Materials - regulatory evolution and current situation".
2022	Speaker at REMTECH 2022 in Ferrara, within the "Remtech School - Fill matrix remediation" session with presentation "The issue of Fill Materials - regulatory evolution and current situation".
2017-2023	Lecturer in the Course "Risk Analysis (AdR) contaminated sites - Basic Module + Advanced Module", with presentation of Risk Analysis model (Risknet 3.0/Risknet 3.1) and presentation of various case studies for training purposes (multiple editions of the course in Rome, Milan, Bologna).
2019	Speaker at the INTERNATIONAL CLEANUP CONFERENCE 2019, in Adelaide (Australia) with

- a presentation titled: "SOIL GAS DATA UTILIZATION: ITALIAN GUIDELINES AND THE RISK-NET 3.1 PRO HHRA SOFTWARE".
- 2019** Lecturer in the Course "CONTAMINATED SITE REMEDIATION" (organized by IKN), held in Milan, with presentation "The contaminated site remediation procedure - Regulations and established practices".
- 2019** Lecturer in the Course "ADVANCED TRAINING SCHOOL ON CONTAMINATED SITE REMEDIATION" held in Ravenna within the "Fare i conti con l'ambiente" initiative, with presentation "The New Risk-net 3.1 Pro software (Theory and Exercise)".
- 2018** Speaker at the international conference GlobalCleanUp 2018, in Coimbatore (India) with a presentation titled: "RISK-NET PRO 3.0. A NEW TOOL FOR THE RISK ASSESSMENT OF CONTAMINATED SITES".
- 2018** Speaker at REMTECH 2018 in Ferrara, within the HEALTH RISKS AND PREVENTION MEASURES FOR WORKERS IN REMEDIATION SITES session with presentation "Historical documentary research in the context of risk assessment related to the presence of buried war ordnance".
- 2018** Speaker at the XVII National Congress of Environmental Chemistry and Cultural Heritage - "The protection of Environment and Cultural Heritage in a changing World" with a presentation titled "Risk analysis as a tool to optimize the remediation of a contaminated site".
- 2018** Lecturer in the Course "3rd CAMGEO School - Sampling and Analysis of Geological Matrices", event organized by the Italian Geochemical Society, held in Abbadia San Salvatore, with presentation "The diffusion and fate of organic substances in the subsoil and groundwater and their criticalities".
- 2018** Lecturer in the 2nd level University Master's in "CHARACTERIZATION AND TECHNOLOGIES FOR CONTAMINATED SITE REMEDIATION" at the Faculty of Mathematical, Physical and Natural Sciences and the Department of Chemistry of the University of Rome "La Sapienza", with presentation on the application of Risknet 3.0 software for Risk Analysis.
- 2018** Lecturer in the ATIA-ISWA Workshop "Excavation activities and soil and rock management: focus on safety and contaminated sites" held in Ravenna within the "Fare i conti con l'ambiente" initiative, with presentation "Soil sampling and analysis methods according to context".
- 2018** Lecturer in the Course "ADVANCED TRAINING SCHOOL ON CONTAMINATED SITE REMEDIATION" held in Ravenna within the "Fare i conti con l'ambiente" initiative, with presentation "PRACTICAL EXERCISE ON RISKNET 3 SOFTWARE. FOCUS SOILGAS AND NEW ISS-INAIL DATABASE".
- 2018** Speaker in the Course organized by Confindustria - "Second module: The discipline of water discharges" with a presentation on technical aspects related to water discharge discipline.
- 2017** Lecturer in the Course "Risk Analysis in Remediation and landfills", at FAST in Milan, with presentation on Fate & Transport models: Indoor and outdoor inhalation and leaching and groundwater transport.
- 2017** Lecturer in the Course "ADVANCED TRAINING SCHOOL ON CONTAMINATED SITE REMEDIATION - Risk Analysis/Monitoring/Hydrogeology/Geotechnics/International comparison", held in Ravenna within the "Fare i conti con l'ambiente" initiative, with presentation on "Criticalities in the application of risk analysis in urban contexts".
- 2017** Speaker in the Course organized by Confindustria - "Second module: The discipline of water discharges" with a presentation on technical aspects related to water discharge discipline.
- 2017** Speaker in the Workshop "Sustainable environmental management - Industrial areas and transport infrastructure" with a presentation on the natural presence of organic compounds (Benzene) in rocks - a real case on the Valico Variant.
- 2016** Speaker at the international conference CleanUp India 2016, in Coimbatore (India) with a presentation on Case Study of Risk Analysis application and a presentation on Case Study of L-NAPL site remediation.
- 2016** Lecturer in the Course "Risk Analysis in Remediation and landfills", at FAST in Milan, with presentation on Fate & Transport models: Indoor and outdoor inhalation and leaching and groundwater transport.
- 2015** Lecturer in the Course "Risk Analysis in Remediation and landfills", at FAST in Milan, with presentation on Fate & Transport models: Indoor and outdoor inhalation and leaching and groundwater transport and case study presentations.
- 2014** Lecturer in the Course "Risk Analysis in Remediation and landfills", at FAST in Milan, with presentation on Fate & Transport models: Indoor and outdoor inhalation and leaching and groundwater transport.
- 2014** Lecturer in the Course "ADVANCED TRAINING SCHOOL ON CONTAMINATED SITE REMEDIATION - Risk analysis, monitoring and verification of interventions", held in Ravenna within the "Fare i conti con l'ambiente" initiative, with presentation on critical aspects related to vapor intrusion in indoor environments in the risk analysis procedure.
- 2014** Lecturer in the Course "Contaminated site characterization and remediation techniques", at the Order of Chemists of ROME (interregional Lazio-Umbria-Abruzzo-Molise) with presentation on Characterization of contaminated sites.
- 2014** Speaker in the Course "Vapor Intrusion: Methods, Protocols and Case Studies", at FAST in Milan
- 2013** Speaker in the Course on REACH "Safety Data Sheets and verification of exposure scenarios in the work environment (PROC) and towards the external environment (ERC) in the context of a chemical safety assessment (CSA)" at F.Ili Parodi company in Genoa.
- 2013** Speaker at the international conference CleanUp 2013, in Melbourne (Australia) with presentation on a Risk Analysis Case Study.

- 2013** Organizer (as Order of Chemists of Liguria) and moderator of a seminar in Genoa on Risk Analysis
- 2012-2013** Lecturer (4 hours) at the 2nd level University Master's in "Management of Chemicals - Safety and environmental impact of substances classified from a chemical point of view: integrated approach to EC regulation 1907/06 - REACH" A.Y. 2012-13
- 2012-2013** Speaker in seminars on the Discipline for the use of excavation materials under the new D.M. 161/2012, organized by the Orders of Geologists and Chemists of Liguria.
- 2012-2013** Lecturer in the specialization course on water treatment, organized by TICASS, regarding current legislative aspects on water resource monitoring
- 2012-2013** Lecturer in the professional training course organized by the Genoese Building School Entity on contaminated site remediation and securing and on Risk Analysis
- 2012** Lecturer in the professional training course "Safety Technician (Safety and environmental impact expert in industry", organized by E.A.F.R.A. Entity, accredited by the Liguria Region
- 2011** Speaker at the conference organized by the Italian Scientific Group Studies and Research of Milan within Environment Week 2011 - Presentation of the remediation of the National Interest Site ex-Stoppani
- 2008** Speaker at the conference "Regional Law on Optimal Territorial Areas (ATO)", in Genoa, for the part related to technical aspects related to treatment plants
- 2007** Port Ecology lessons at the University of Genoa
- 2003** Lecturer (24 lesson hours) in the master organized by the Province of Savona titled "Expert in integrated water cycle management" for the part related to design and sizing of wastewater treatment plants, and cost estimation.
- 2001** Lecturer in the course for managers and executives of the Province of Genoa on "Sediment and surface water pollution in port areas".

PERSONAL DATA

I authorize the processing of my personal data pursuant to Legislative Decree June 30, 2003, n. 196 "Code regarding the protection of personal data".

The undersigned declares to be aware that this curriculum vitae will be published on the institutional website of the University, in the "Transparent Administration" section, in the manner and for the duration provided by legislative decree n. 33/2013, art. 15.

Date: July 17, 2025

Signature: Alessandro Girelli