STUDIO IDROGEOLOGICO
geoeco
di dott. geol. G.P. DROLI
(Hydrogeologist - D.E.A. Ecole des Mines de Paris)

dott. geol. GIAN PAOLO DROLI
hydrogeologist U.E.-USA certified Ecole Nationale des Mines de Paris ARMINES
U.E.: Master of Advanced Studies - DEA-MAS - U.S.A.: Master of Research - M.RES

- Analysis and Mathematical Models for Water Management and Depollution
- Plans and Works for Water in: Industry, Agriculture, Public Drinking Water Services
- Energy by RES: Geothermal, Hydroelectric, Biomass, Green Hydrogen
- Fluid-Dynamic Models for rivers, shorelines, ports
- Environmental Impacts, Water Crisis and Public Emergencies
- Legal office for Water Issues, Business Plan for Environmental Investments

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Dr. Geol. GIAN PAOLO DROLI hydrogeologist

U.E.-U.S.A. certified - D.E.A. Ecole Nationale des Mines de Paris
U.E.: Master of Advanced Studies - DEA-MAS - U.S.A.: Master of Research - M.RES.

Water Sciences, Quantitative hydrology and hydrogeology

Development of renewable energies: geothermal, hydroelectric

Research & Development of water projects and works: drinking, mineral, agricultural, industrial, clinic-thermal

Mathematical models in ground & surface waters for predictive simulations, Fluid Dinamic Models for erosion, sedimentation and depollution of coastal and river areas, Ports and Marinas

Water and soil rehabilitation, depollution of aquifer systems and surface water bodies, Risk Analysis

Planning & management of water resources, Environmental Impact Evaluations, assistance for water/pollution lawsuits

SUMMARY SHEET

PROFESSIONAL CV

INFORMATIVE SHEET

Short profile (2025)

After his scientific high school certificate, ***Gian Paolo DROLI*** *(1959) became* ***doctor in Geological Sciences*** *(academic year 1986-87) at the* ***University of Trieste (Italy)*** *with thesis in "Geophysics methods applied to hydrogeology in mountain zones". He spent 2 years in France (1990-91) by the engineering school* ***"Ecole Nationale des Mines de Paris"*** *applying himself to hydrology-mathematics and obtaining the* ***D.E.A. hydrogeology specialisation U.E. and U.S.A. certified*** *diploma in "Water Sciences and Management - Hydrology and quantitative Hydrogeology" (given by French Ministry of National Education and Research). Every year he attends several* ***courses and public conferences****, both in Italy and abroad, dealing with hydrogeology, water and renewable energy resources in order to be always technically and scientifically updated.*

Working as hydrogeologist, private firm, he created in Udine (Italy) ***in 1986 the STUDIO IDROGEOLOGICO GEOECO*** *and* ***in 1990*** *he started applying exclusively in* ***hydrogeology, water management and drinking water projects, depollution and protection of ground and surface waters and contaminated areas, management of aquifer systems, geothermal and hydroelectrical plants in E.P.C.*** *with particular attention to the complex problems that require high technical and scientific standards and innovative solutions.*

On these particular subjects he works as expert and advisor for ***National and Public Authorities, Private Companies, Universities, Health centres and Councillor's offices,*** *especially in central and north-Italy, and for some foreign countries (Brasil, France, Australia, Bulgaria, Romania, Austria). Since 1990 he is promoter, both in Italy and abroad, for about 20 innovative activities, hydrogeological international patents, new law texts (national and regional laws) regarding geothermal, groundwater human risk management, drinking water supply for large territories, technical-strategic and prescriptive development in natural water resources.*

At present (2019) GEOECO realized ***380 hydrogeological-hydrological projects and studies for private and public companies****.*

He ***taught in Italian, French, Dutch universities*** *and important international Scientific bodies. He is author of* ***60 scientific-technical articles*** *and papers about hydrogeology, water management and drinking water projects, depollution, management of aquifer systems, geothermal studies.*

WATER SECTOR

Optimal exploitation of underground and surface water resources (aquifers and rivers) for the production of electricity and heat from geothermal, hydroelectric, and biomass, for drinking, agricultural, fisheries, and industrial uses:

water resource management strategies (application of the former "Galli Law" Law 36/94 and Legislative Decree 152/2006), water exploration, construction of aqueduct intake structures and aqueducts (wells, tunnels, trenches, etc.), management of springs and water resources in mountainous and karst areas; analytical and numerical mathematical models for optimal water management; geothermal and hydroelectric power plants, energy from green hydrogen; exploration and management of mineral and thermal waters; drafting of standards and laws for water protection and management.

Management of water pollution problems, vulnerability, prevention, protection, decontamination, and remediation of soil and water (aquifers, rivers, lakes) from contamination:

Programs and interventions to prevent contamination in high-risk areas (landfills, industrial, agricultural, and urban areas), aqueduct intakes, etc.; water quality monitoring, remediation projects for contaminated sites, construction of wells and other works necessary for the remediation of contaminated soil and water, consultancy for laboratory analysis; management of emergencies and water crises, prevention of acts of aggression and attacks against drinking water resources.

Problems related to surface water (lakes, rivers, artificial drainage networks), management of marine coastlines and port areas:

Construction of river embankments and development of riverbank basins, river flood forecasting and protection systems; canals and surface drainage systems, both single and in tunnels, management of artificial drainage networks; Construction of dams, artificial lakes, and solutions to sediment transport problems; coastal protection, coastal erosion issues, and management of water, hydrodynamic, and environmental issues in coastal areas and ports.

ENVIRONMENTAL SECTOR

Design and remediation of landfills, quarries, mines, and "difficult areas":

Prevention and interventions on polluted industrial sites, degraded areas in general, areas subject to coastal and river erosion, landslides/avalanches, building subsidence, and hydrogeological instability.

Environmental and Strategic Impact Assessments, Exploitation of water and natural resources:

Management of ecological issues in industry, renewable alternative energy, and energy saving; environmental and strategic impact assessments of works (EIA and SEA), bioengineering projects; exploitation and organization of water resources for agriculture, fishing, forestry, tourism, and urban development.

GEOLOGY AND GEOTECHNICS SECTOR

Geological, geotechnical, and geostatic studies and work on structures, buildings, infrastructure, and industrial sites for feasibility and construction purposes. Consultancy as an expert witness for the **Courts of UDINE and ANCONA** on construction issues, soil stability, and landslide-prone and/or degraded areas.

Among the **most important hydrogeological and hydrological works carried out** are (in BLUE the works on geothermal, geophysical, modelling and management and protection of water resources):

AREAS OF WORK ON VAST SCALE: FOCUS ON WATER PLANNING AND UTILIZATION.

1. BOLOGNA-FLORENCE HIGH-SPEED RAILWAY SYSTEM PROJECT: In-situ hydrogeological surveys and flow-transport-vulnerability study of the potable and hydromineral aquifers of the Emilian Variante. 1992.
2. FRIULI V. GIULIA REGIONAL WATER PROTECTION PLAN. Friuli Venezia Giulia Region, 2004-08.
3. Hydrogeological-mathematical model of the potable aquifer of the Carboniferous Limestone of the METROPOLE DU NORD. Lille (F, B). (Hydrogeological-mathematical model of the potable aquifer of the Carboniferous Limestone). National School of Mines, Paris, 1990-91.
4. Study of the ARTESIAN GROUNDWATER OF THE LOWER FRIULI PLAIN: Integrated management and protection of water resource quality. Hydrogeological study and mathematical model. University of Udine, 1994.
5. Territorial organization of the INTEGRATED WATER SERVICE IN THE PROVINCE OF UDINE - Law 36/94, art. 8. Province of Udine – Province of UDINE, Department of the Environment, 1995.
6. Hydrogeological study for the environmental remediation, vulnerability, protection, and artificial recharge project for groundwater in the Middle Friuli region – Friuli Venezia Giulia Region, Ledra-Tagliamento Reclamation Consortium - Udine, 1996.
7. Quantitative hydrogeological study of the AMGA AQUEDUCT aquifer in the Zompitta Plain for the optimization of water withdrawals, vulnerability, management, and protection of the drinking water resource for the City of Udine aqueduct – Convective-dispersive mathematical model for water management. AMGA spa, Udine, 2002.
8. Study for the prevention of diffuse pollution, aquifer vulnerability, and management of water crises in the PROVINCE OF PORDENONE. Provincial Administration of Pordenone. 1999.
9. Environmental monitoring and remediation of the Premariacco and Cividale del Friuli area: "FIRMANO PULITA 1998" PROJECT - PROVINCE OF UDINE. Water pollution control and prevention plan. Hydrogeological model and groundwater vulnerability. Groundwater remediation project. Provincial water contamination management model in an area with 10 landfills and 20 quarries. Udine. 1998.
10. STRUCTURAL MODEL OF VENETO AQUEDUCTS: Quantitative, qualitative, and environmental hydrogeological studies, calculations, and assessments on behalf of the MIDDLE BRENTA municipalities and the groundwater recharge area. Municipalities of the Middle Brenta: Carmignano, Nove, Pozzoleone, Municipalities of the Province of PADUA, 2006-15.
11. Hydrological, hydrogeological, and environmental study for the project "First urgent civil defense interventions for the exceptional meteorological events (VAIA Storm) in Friuli Venezia Giulia in the municipalities of Pulfero, S. Pietro, S. Leonardo, and Savogna in the Natisone, Cosizza, Erbezzo, and Alberone Rivers." Municipality of S. Leonardo, 2019-20.
12. Preliminary quantitative hydrogeological study for irrigation and civil supply for 2.5 million utilities from aquifers for the new urban area of NEW CAIRO (Egypt). 2019-20.
13. Protection of drinking, irrigation, and spring water with PFAS-PFOE POLLUTION OF VENETIAN PLAIN GROUNDWATER in the provinces of Vicenza, Padua, and Verona. MISO and Reclamation Interventions, Mathematical Hydrogeological Model for Predictive Simulation for the Management of Polluted Flows and the Design of Defense Interventions. TRISSINO, 2020-ongoing.

AREAS OF WORK ON SMALL SCALE: FOCUS ON GEOTHERMAL, HYDROELECTRIC, THERMAL-MINERAL WATER WORKS, GROUNDWATER CLEAN-UP, HYDROGEOLOGICAL DEPOLLUTION AND PROTECTION AT LOCAL SITES:

1. Hydrogeological study and water intake optimization measures for the CITY OF PORDENONE AQUEDUCT – TORRE EST POWER PLANT. Groundwater monitoring, integrated well system design, emergency pumping system, restoration of existing wells, H&C Production. Pordenone, 2000.
2. Environmental impact study for the remediation and reconstruction of the abandoned industrial site known as the "EX-CANTONI" area in LEGNANO (Milan). Hydrological and hydrogeological study, groundwater vulnerability, geognostic and chemical investigations, mitigation and prevention measures, internal hydroelectric power plant project on the Olona River. Total project cost: £120 billion. Milan. 2000.
3. Coordination of hydrogeological and hydrological studies for the hydroelectric concessions of SOC. ELETTRICA COOP. ALTO BUT - SECAB (Paluzza - Udine). Noiaris, Museis, and Enfretors power plants, new penstock for the Cleulis power plant. Municipalities of Paluzza, Cercivento, Ravascletto, Treppo, Ligosullo, and Sutrio (Udine) for a total of 5,200 users. Paluzza (Udine) 1994-97.
4. General coordination, design, and environmental assessment study for the S. ROCCO HYDROELECTRIC POWER PLANT – Pontebba (Udine), 17,000 MWhe, 4,000 m pipeline and tunnel. Workload: €17.8 million. Udine 2007-2009.
5. Study for the exploration of the GEOTHERMAL RESOURCE OF LIGNANO and hydrogeothermal balance at the municipal level. Lignano Sabbiadoro (Udine). 2009.
6. Geothermal study for research and concession in the LIGNANO "TERME S.I.L." sector. Environmental Impact Assessment. Design, D.L. for drilling and geothermal use for H&C and clinical-thermal treatment. Lignano Sabbiadoro (Udine). Total cost of the spa hotel: €22 million. SIL s.p.a., Lignano. 2007-11.
7. Geothermal study for the use of the resource in the Lignano "TURISTICA SPORTIVA" sector. Environmental assessment report, Design, D.L. for drilling, Mining concession. TURISTICA SPORTIVA LIGNANO srl (Lignano-Udine). 2007-2014.
8. Project coordination, Environmental Impact Assessment (EIA), and Landscape Report for the 1 MWe “CEMUR” WOOD BIOMASS POWER PLANT and Authorization (San Leonardo – Udine). 2010-2016.
9. Geothermal study for the heating and cooling generation plant at the “CITY PARK – CONDOMINIO DE ECCHER” - Pordenone. 2012-13.
10. Hydrogeological-geothermal study for the use of geothermal resources in the Lignano Riviera “GREEN VILLAGE RESORT” sector. Environmental assessment report, Design and Construction Management (DLM) for drilling and use, Environmental Impact Assessment (EIA), mining concession. Lignano (Udine). Total project cost €15 million. AGENZIA EUROPA srl - Bibione, 2006-2014.
11. Hydrogeological-geothermal study for the exploration of hydrothermal resources and for the mining concession application in the Grado (GO) “VAL CAVARERA - SACCA MORERI” sector. Screening report and Environmental Impact Assessment (EIA). Grado (Gorizia). Total project cost: €800 million. MONTE MARE GRADO srl, 2011-16.
12. Preliminary hydrogeothermal study for concessions and project coordination for three 1.5 MWe geothermal-electric plants and H&C heat transfer in Tuscany and Northern Italy. Total expected project cost: €39 million. SALVATORE LEGGIERO Studio, Florence, 2014.
13. Hydrogeological-geothermal study for the exploration of geothermal resources in the Lignano “GETUR EFA ODA” sector. Environmental Impact Assessment. Drilling and exploitation project for the mining concession application. Lignano Sabbiadoro (Udine). GETUR EFA-ODA, 2014-17.
14. Hydrogeological study and patent for a toxic gas collection system in oil/geothermal wells up to 5,000 m deep, decontamination of aquifers contaminated by fracking fluids. ANNSCA Sydney. 2014-ongoing.
15. Study, design, geothermal water concession, and construction management for the hot-cold production plant for thermal self-sufficiency at IKEA-VILLESSE (Go) - 2016-19. Geothermal work cost €0.8 million.
16. Geothermal Resources Exploration Permit – Geophysical surveys and 4,300 m well design. PAUR and EIA procedures for the 2 MWe AGA 4.0 geothermal-electric-thermal plant “APRILIA MARITTIMA Hydrogeological Zone” (Latisana). Total cost €24 million. AGA 4.0 srl - Udine, 2024-ongoing.
17. Preliminary analysis, environmental impact, geothermal-electrical-thermal study, and coordination for the public-private project for the production of electricity and thermal energy from geothermal energy and MSW "Consortium Municipality of Curitiba-GME Aerospace." Expected total cost €40 million. GME Aerospace (Curitiba, Brazil). 2016-18.
18. Preliminary quantitative-geothermal study for a 3.5 MWe combined plant-power station (electricity, H&C, OFMSW, industrial organic waste) for Dubai-South City (Emirates, Australia) – Preliminary hydrogeological-quantitative study for the integrated waste-RES-geothermal project, expected cost approximately €40 million. Studio Consulenze Internazionali Dott. Giorgio MASSERINI (waste management and RES production), 2021-ongoing.

19. Study, design, geothermal water concession, and construction management for the hot-cold production plant for thermal self-sufficiency at the "OCEANIA" INDUSTRIAL-COMMERCIAL SITE. Total project cost: €2.5 million. Remanzacco (Udine). 2022-ongoing.
20. Research project for a 2 MWe geothermal-electric-thermal plant in the "PORTO MARGHERA" Hydrogeological Zone (Venice). Total project cost: €24 million. GEOH srl, 2020-ongoing.
21. PFAS-PFOE POLLUTION REMEDIATION OF GROUNDWATER at the Ex-Miteni plant in TRISSINO (Vicenza). Protection of drinking, irrigation, and spring water with a MISO and Reclamation Project, mathematical hydrogeological model for predictive simulation for the management of polluted flows and the design of defense interventions. Appointment of hydrogeologist for the R.U.P. Municipality of TRISSINO - 2020-ongoing.
22. MINERAL AND SPRING WATERS at the "MALECCHI Spring – SOVICILLE (Siena)": Hydrogeological study for Research Permit. Sovicille – 2022-ongoing.
23. Numerical HYDROLOCAL-HYDRAULIC MODELS for Hydraulic Compatibility Checks (PGRA 21-27 – River Basin Authority) at the following sites: LIGNANO Terme Porta Tagliamento (Udine), BIBIONE Commercial Area of S. Michele al Tagl. (Ve), JESOLO Centro (Ve), JESOLO Nord-Est (Ve), S. DONA' DI PIAVE Sud (Treviso), MUSILE DI PIAVE (Treviso), S. LEONARDO Industrial Area "Cemur" (Udine). Period 2021-ongoing.
24. NUMERICAL RIVER MODELS for Hydraulic Compatibility Checks (PGRA 21-27 – River Basin Authority) to calculate the volumes of aggregate removal from the riverbed for river maintenance and safety projects: F. TAGLIAMENTO - Municipalities of S. DANIELE FRIULI, FORGARIA, RAGOGNA. 2023-2024.
25. EIA and preliminary hydrogeological-geothermal and feasibility study for the exploration of geothermal and clinical-thermal resources in the PORTO MARGHERA “PALAIS LUMIERE” sector - 2013-2017, project later called “JESOLO GREEN TOWN” transferred to JESOLO (Venice). Total project cost €2.15 billion. GEOECO Hydrogeological Study (Udine), BIM Consultant & Management (Monaco Monte Carlo - Bordighera), HELICA srl (AMARO – Udine), 2017-19 and 2024-ongoing.

1) PERSONAL, IDENTIFICATION AND TAX DATA

• Gian Paolo DROLI, Italian national, born in San Leonardo (UD) on July 22, 1959.
• Resident at Via F. Filzi 47/2 - 33100 Udine.
• One son, Federico.
• Sports practiced: karate (2nd Dan black belt = a healthy mind in a healthy body).
• Hobbies: skiing, sailing, mountaineering.
• Foreign languages spoken and written: FRENCH and ENGLISH.
• Headquarters: Via Cosattini 32, Udine. Cell. 337/532202, Tel. 0432/229424, Fax 0432/519343.
• Email: geoecoud@tin.it.
• VAT number: 01556930301 - Tax code: DRL GPL 59L22 H951K.

2) CURRICULA STUDIORUM

- **Degree in GEOLOGICAL SCIENCES** (thesis in Hydrogeology), University of Trieste (1986-87).
- **Qualified to practice as a geologist**: with the state exam in 1988, qualified to practice as a GEOLOGIST since 1989, registered with the Order of Geologists of the Friuli Venezia Giulia Region no. 182.
- **Specialisation in "Quantitative Hydrology and Hydrogeology**" U.E certified Postgraduate Diploma D.E.A. in "Sciences de l'eau et amènagement - option HYDROLOGIE ET HYDROGEOLOGY QUANTITATIVE" (thesis in Mathematical Modelling of drinking waterworks – proff. De Marsily G., Ledoux E., Combes P.) Laboratoire d'hydrogeologie mathematique - Ecole Nationale Supèrieure des Mines de Paris-ARMINES, Paris (F), (1990-91).
- **Technical-regulatory update**: presence at 62 courses and conferences regarding hydrogeology, hydrology and environment for a total of 135 days. The most important are the following:
    - Hydrogeologie karstyque. CNRS, Univ. Paris VI, Moulis Thoulouse (8-12 avril 1991). (proff. Bakalowicz, Hubert).
    - Modelling of flow and contaminants in the subsoil with emphasis on the unsaturated soil. IGWMC, IHE, Delft, Holland (28 june-2 july, 1993). (Proff. Bear J., Yeh G.T.).
    - Protezione e gestione delle acque sotterranee: metodologie, tecnologie e obiettivi. CNR - GNDCI. Nonantola (Modena), Italia (17-19 maggio 1995). (Proff. Civita M., Francani V., Gelmini R., Beretta G.P., Pellegrini M., Celico P., Alifraco G., Pilolli D.).
    - Groundwater flow and transport modelling 3D using Modfluw-MT3D and GIS. IGWMC, IHE, Delft, Holland (25-29 november 1996). (Prof. Bear J.).
    - Modern approach to groundwater tracer investigations: methods and models. IHW, ETH Honggerberg, Zurich, Switzerland (9-11 mach 1998). (Proff. Carrera J., de Marsily G., Kinzelbach W., Balderer W., Hoehn E., Kipfer R.).
    - Modelli di simulazione di flusso di falda e trasporto dei contaminanti in ambiente Windows. ESI Italia, Milano, Italia (1-3 marzo 2000). (Proff. Beretta G.P., Miller Fermour M.).
    - A hands-on course groundwater Risk Analysis and assessment and remedial targets for contaminated land. ESI International, Shrewsbury, England (23-24 July 2001). (Proff. Herbert A., Streely M., Sears R., Whittaker J., Stagg K., Johnson A., Hulme L.).
    - The remediation of contaminated waters and soils. Princeton Groundwater Waterloo Inc., Denver, U.S.A. (14-18 march 2005). (Proff. Cleary R., Kueper B. H., Kavanaugh M. C., Rorech G. J.).
    - XII Simposio Internazionale sulla Gestione dei Rifiuti e sullo Scarico Controllato, Salute e Inceneritori. S.ta Margherita di Pula, Cagliari – Italy, 5-9 Ottobre 2009. (Prof. Cossu R., I.W.W.G.).
    - Advisory working group on geothermal policy – European Geothermal Energy Council (EGEC). "Towards 2030-2050, Green Paper 2030 and 2050 Energy Roadmap". Bruxelles (B) 14 May 2013.
    - European Geothermal Congress 2013 (Expò and short course on "Drilling and completion of geothermal wells"). Pisa (Italy), 3-7 June 2013.
    - Advisory working group on geothermal policy – European Geothermal Energy Council (EGEC). "European Geothermal Panel". Bruxelles (B) 22-23 Sept 2014.
    - MODFLOW in QGIS: groundwater flow in FREEWAT digital plattform – Scuola Superiore Sant'Anna di PISA. PISA (I) 21 Aprile 2016.
    - The aquifer recharge in controlled conditions in ITALY after the low D.M. 100/2016: opportunities and prospectives. Assoc. Acque sotterranee – Lucca (I) 28 Nov 2016.
    - The geothermal ressources: the technical, administratives, environmental limits for an optimized exploitation. – Ordine Geologi Trentino-Lombardia-Veneto-Friuli-Emilia Romagna and the Museo Civico Rovereto Foundation. Rovereto, Trento (I). 1-2 Dec 2016.

- CNR Campus PISA – Drilling in deep supercritical ambient of continental Europe. Geothermal for electricity production (Descramble final conference), PISA, 28/03/18.
- European Geothermal Energy Council (EGEC). ETIP-DG "Vision for Deep geothermal ressources, drilling technologies, electricity and Heating&Cooling energy production" Firenze, 29/03/18 - Bruxelles (B), 24 Sept 2018.
- European Geothermal Energy Council (EGEC). ETIP-DG "Deep geothermal market: ressources, drilling technologies, electricity and Heating&Cooling energy production" Bruxelles (B), 2019, 22, 23.
- HEC-RAS numerical fluvial model for floods, storms and sedimentary river crisis simulation, prehevention and management. Engineers Order of PORDENONE. Cordenons, 8/03/2024.
- "Hydrogeological-numeric modelisation applied to geothermal Heating & Cooling plants in low enthalpy". International Association Hydrogeology, SYMPLE – 14/10-18/11/2022.
- "Short course in flood risk management – policy and regulatory aspects of the P.G.R.A. 21-27 (Floods Risk Management Plan 21-27 for the nord-est of Italy). Province of PORDENONE Engineer Order & Regional FRIULI V. GIULIA Geology Order – Pordenone, 28/04/23, 8/05/23, 25/05/23, 29/05/23.
- UTILIZZO DEL SOFTWARE HEC-HMS utilisation for the Numerical modelisation in river management, flood risk areas, sedimentation government works. Province of PORDENONE Engineer Order. Cordenons, 8/03/2024.
- "GERER L'INCONNU - SCIENCE DE GESTION DE LA TRANSITION CONCEPTIVE: Bauhaus des transitions de l'Ecole des Mines de Paris". MINES-PARISTECH, Paris (F), 13/03/24.

3) PROFESSIONAL AND PERSONAL QUALIFICATIONS

- Member of the W.W.F. of Udine since 1985 where he coordinated, from 1985 to 1990, studies and work groups regarding controlled landfills and natural waters.
- Since 1986 he is owner of the Hydrogeological GEOECO Firm in Udine.
- Responsible for the Civil Defence of San Leonardo (Udine), from 1994 to 1996.
- Member of the "Waters Commission" and "Pits Commission" of the Order of the Engineers of the city of Udine since 1995.
- Member of the study group "36/94 Act - integrated water resource". Ecology and Environment Councillorship of the government for the Province of Udine, 1995-96.
- Manager of the "Water and Hydrogeology Commission " for the Regional Order of Geologists Friuli Venezia Giulia, from 1996 to 1998.
- Member of the Regional Commission "Atrazine and its metabolites in waters", Regional Health Service Direction - Health and Environment protection since 1996, where he worked as follows:
  - manager of the work group "water crises management: emergency operating outline for the responsibility of the EE. LL., waterworks and A.S.S.", 1996-97.
  - proposing member and member of the work group "Cervignano pilot study: prevention methodologies and decontamination activities for the applied water-bearings in the city of Cervignano del Friuli (Ud)", 1997.
- Member of the "Technical-scientific Committee" in the provincial district of Udine for the authorized analysis of environmental plans. Ecology and Environment Councillorship of the government for the district of Udine since1998.
- Member of Building Commission: at present commissioner in the districts of S. Leonardo, Drenchia, Torreano and Stregna. Currently also member of the Urban Planning Commission of the city Lignano Sabbiadoro. He worked as commissioner for the Building Commition of the districts: Grimacco, Pulfero, Mortegliano and S. Pietro al Natisone (all assignments carried out for periods of 10-12 years).
- Since 1992-presently: Member of the "Italian Hydrotechnics Association"; nominated Councilman in 1998 for the Friuli Venezia Giulia department.
- 1993-presently. Member of the I.A.H. "International Association Hydrogeologists". Italian Committee, 1993-presently.
- 1994-actualy. Technical consultant of the Law Court in UDINE and ANCONA (2001-presently) for the Judges regarding Water problems, geothermal, hydrology and hydrogeology.
- 1994-presently: Technical manager of the Coordination Group "Italian Scientific Studies Group and Researches (G.S.I.S.R.) - Drinkable Waters and Water Resources Department", Milan.
- From 2005 to 2008: team leader of the "Groundwaters, Surface waters and Mathematical Model" working group for the REGIONAL PLAN OF WATER PROTECTION of the FRIULI V. GIULIA, Trieste.

- 2000-2016: founder-member and vice-president of LINFA limited company, the first agency in the region Friuli for professional advise in environmental issues, natural resources planning and management (water, air, soil, land, energy, urban-industrial waste).
- From 2015 to 2018: team leader of the Order of Geologists of Friuli V. Giulia region (Italy) for the PLAN OF WATER PROTECTION ("Ground and surface waters" working group - Trieste).
- 2002-presently: member of work group "Undue influences and natural drinking water protection", as part of the program "Destined waters to the home consumption", with University of Brescia work groups directed by prof. Collivignarelli (Univ. of Brescia).
- 2013-presently: member EGEC - European Geothermal Energy Council (Advisory Working Group on Policy) - Brussels (B).
- 2016-presently – founder and partner of AGA 4.0 s.r.l., start-up with social vocation (CC.II.AA. Udine) in geothermal electric and thermic plants development.
- 2018-presently – team leader of the working-group "Water in the city, Dinking water strategies, Geothermal and Renewable Energies, Environment" for the UDINE Municipality Vice-Major and Councillor of Pubblic Works (Udine – Italy).
- 2018-2024 – one of three administrators of the directional board of FVG ENERGIA s.p.a. (Friuli V. Giulia Region - Italy), public company for managing of the urban thermal plants and renewable energies in Friuli V. Giulia Region.
- 2019-2023 - Delegate for the municipalities of San Leonardo and mountain territories for the "Natisone River Contract". Valli del Natisone - Friuli Venezia Giulia Region.
- 2020-2023 – Vice-team leader of the working-group "Renewable Energies and Water protection and Environmental projects" for Friuli V. Giulia Region Councillor of Economic Development (Trieste – Italy).
- 2021-presently - European Commission Expert list – in geothermal, water scarcity management, groundwater depollution and protection, water management – n. EX2020D391647.
- 2022-presently – Director and Sole Administator of the AGA 4.0 s.r.l. company (Advanced Geothermal Applications – 100.000€ society capital).
- Spoken and written languages: French, English.

4) PROJECTS, RESEARCH, PLANNING AND ADVISING ACTIVITIES REGARDING WATER, ENERGY, HYDROGEOLOGY AND HYDROLOGY

(in *Italic character* are the parts carried out completely by Dr. DROLI. In DDA are the studies carried out for Environmental Impact Studies, environmental and water Due Diligences or similar).

4.1 - GEOTHERMAL ENERGY, GEOTHERMAL AND THERMAL WELLS, GEOTHERMAL-ELECTRIC AND THERMAL POWER PLANTS

- Geothermal feasibility study in the Valcanale area of the Julian Alps. Preliminary geological and hydrogeothermal analysis. Tarvisio (Udine). FRIULANA BITUMI srl, 2000.
- Hydrogeological study of the coastal area of Lignano Sabbiadoro and geothermal exploration using deep artesian wells. For the MUNICIPALITY OF LIGNANO SABBIADORO – MAYOR'S OFFICE. 2000.
- Hydrogeological-geothermal study for the exploration of hydrothermal resources in the "Sports Village" area. Cordenons (Pordenone). "Sports Village" initiative development company. 2000.
- Study for the exploitation of minor geothermal resources in the Tempio area of Latisana. Hydrogeological-geothermal study. Latisana (Udine). 2001.
- Hydrogeological-geothermal study for the exploration of hydrothermal resources in the Lignano Pineta area of the "Tra i Pini" Hotel. Hotel Tra i PINI – Mr. VACCARI. Lignano Sabbiadoro (Udine). 2003.
- Rehabilitation of the Moretti geothermal well in Latisana. Hydrogeological-geothermal study. Latisana (Udine). (Expert expert witness from the Court of Udine). 2003-2009.
- Hydrogeological-geothermal study for the exploration of hydrothermal resources and mining concession for use in the Lignano Pineta area of the "Terme S.I.L." area. Environmental Impact Assessment (VIA). DDA. Construction supervision for the construction of the well, which took place in 2010-11. Launch of the thermal-therapeutic recognition procedure for the existing spa facility. Lignano Sabbiadoro (Udine). Total cost of the thermal project: approximately €20 million. SIL spa, 2004-2011.
- Hydrogeological-geothermal study for the search for hydrothermal resources and mining concession in the Lignano Sabbiadoro sector of the "Turistica Sportiva Lignano" area. Screening report and Environmental Impact Assessment (EIA). DDA. Construction supervision for the construction of the well, which took place in 2011. Lignano Sabbiadoro (Udine). Total cost of the geothermal project: approximately €25 million. Turistica Sportiva Lignano srl, 2005-2007-2014

- Hydrogeological-geothermal study for the search for hydrothermal resources in the Lignano Riviera sector of the "Green Village Resort" area. Screening report. Lignano Sabbiadoro (Udine). Total cost of the project: approximately €15 million. AGENZIA EUROPA srl, 2006-2014.
- Hydrogeological-geothermal study for the exploration of hydrothermal resources and mining concession in the Grado (GO) sector, "Val Cavarera - Sacca Moreri" area. Screening report and Environmental Impact Assessment (EIA). DDA. Grado (Gorizia). Total project cost: approximately €800 million. MONTE MARE GRADO srl, 2011-16.
- Geothermal study for the heating and cooling generation plant at City Park – De Eccher Condominium in Largo S. Giorgio - Pordenone. DE ECCHER spa, 2012-13.
- Hydrogeothermal study, permitting, design and general coordination for the construction of three 1.5 MWe net geothermal power plants and heat transfer in northern Italy. Investor: Private fund. 2014. Estimated total project cost: approximately €33 million.
- Hydrogeological-geothermal study for the exploration of geothermal resources in the Lignano Sabbiadoro sector of the GETUR EFA ODA area. Environmental Impact Assessment. DDA. Drilling and exploitation project for mining concession application. Lignano (Udine). GETUR EFA-ODA, BELLAITALIA, 2014-17.
- Hydrogeological study to evaluate the feasibility, effectiveness, applications, and hydrogeological benefits in patented aquifer systems (ANNSCA-WAPPS) of a plant for the decontamination of aquifers contaminated by fracking operations and a system for the capture of toxic/unwanted gases in deep oil and geothermal wells and drilling. 2014-2019.
- Medium-enthalpy geothermal plant and biomass/MSW management with a potential of 600,000 inhabitants for the city of S. Josè – Curitiba (Brazil). Study and preliminary design. GME Aerospace – Curitiba. 2016-18: approximately €40 million.
- Preliminary hydrogeological-geothermal and feasibility study for the exploration of geothermal and clinical-thermal resources for the “STADIO DELLA ROMA” project. Total project cost: €1100 million. 2018.
- Study Hydrogeological-geothermal project, design and permits for the use of geothermal resources through wells at IKEA Villesse (GO). Environmental Impact Report, geothermal project, permits and concessions, Construction Management. IKEA spa, 2015-2019. Total project cost: approximately €0.7 million.
- Geothermal Resources Exploration Permit – Geophysical surveys and well design at 4,300 m. PAUR and EIA procedures for the 2 MWe AGA 4.0 geothermal-electric-thermal plant “APRILIA MARITTIMA Hydrogeological Zone” (Latisana). Total cost: €24 million. AGA 4.0 srl - Udine, 2024-ongoing.
- Research project for a 2 MWe geothermal-electric-thermal plant “PORTO MARGHERA Hydrogeological Zone” (Venice). Total cost: €24 million. Udine, GEOH srl, 2020-ongoing.
- Preliminary geothermal survey for the construction of a geothermal-electric plant in Porto Tolle. GH2 srl (Treviso), 2023-ongoing.
- Environmental Impact Assessment (EIA) and preliminary and feasibility study for the exploration of geothermal and clinical-thermal resources in the PORTO MARGHERA “PALAIS LUMIERE” sector - 2013-2017, project hereafter referred to as “JESOLO GREEN TOWN” transferred to JESOLO (Venice). Original total project cost €2,150 million. Grouping: GEOECO Hydrogeological Study (Udine), BIM Consultant & Management (Monaco Monte Carlo - Bordighera), HELICA srl (AMARO – Udine), 2017-19 and 2024-ongoing.

4.2 - WORK ON RIVERS FOR HYDROELECTRICITY, WIND ENERGY, BIOMASS, DEVELOPMENT OF RENEWABLE ENERGIES, EIA (Environmental Impact Assessment), SEA (Strategic Impact Assessment), and P.A.U.R. (Planning Environmental Impact Assessment) ON PROJECTS WITH MEDIUM AND HIGH ENVIRONMENTAL IMPACT

- Hydrogeological and environmental study of the changes induced in the riverbed following the construction of the Noiariis hydroelectric plant (Udine). DDA (District Department). Quantitative hydrogeological study, data collection campaign, and mathematical modeling. 1994.
- Design of the Rio de Val and Torrente Aupa hydroelectric power plants in the Municipality of Moggio Udinese (Udine). Executive hydrological and hydrogeological study. 1994.
- Renovation project of the hydroelectric plant on the Rio Zaneberde (Dogna – Udine), destroyed by the floods of June 22, 1996. Geological-technical and hydrological report. Dogna (Udine). 1996.
- Application for a concession for a large-scale water diversion to generate motive power at the former ENEL power plant in Vedronza (Udine). Quantitative hydrogeological and hydrological study. 1997.
- Large-scale C.A.F.C. water diversion at the source of the Torre River for hydroelectric and mixed drinking water use in the Municipality of Lusevera. Detailed hydrological and hydrogeological quantitative study. Estimated cost of the works: £15,000,000,000. Udine. 1998.
- Water intakes for the "Alba" industrial aqueduct and hydroelectric power plants owned by Cartificio Ermolli s.p.a. in Moggio Udinese: application for a concession for a large-scale water diversion. Hydrological and

hydrogeological study. Management strategy and optimal qualitative return of the water resource. Udine, 1999.

- Market research and pre-feasibility study for the acquisition of large-scale hydroelectric power plants in Bulgaria. Udine – Sofia. 2002.
- Environmental impact assessment for the Arzene biomass power plant. DDA. Environmental, geological, and hydrogeological framework (assigned by LINFA). Arzene (Pordenone), 2002.
- Environmental impact assessment for the 10MW "Venti di Nurra" wind farm project in Porto Torres (Sassari). Coordination of the working group, climatic, hydrological, geological, and hydrogeological study. (assigned by LINFA). DDA. Sassari. 2003.
- Environmental impact assessment for the Italy-Croatia submarine power line project. MELINE (HR) – PLANAIS (I) 400 kV – HVDC. Working group coordination, climate, hydrological, geological, and hydrogeological study. (assigned by LINFA). DDA. Trieste. 2003.
- Environmental Impact Assessment for the 49.9 MW ElettroGorizia combined-cycle power plant project. Climate, hydrological, geological, and hydrogeological study, atmospheric diffusion and noise models. (assigned by LINFA). DDA. Gorizia. 2003.
- Environmental Impact Assessment for the 4 MW "Serracavalli" wind farm project in the municipality of Collepasso (Lecce). Working group coordination, climate, hydrological, geological, and hydrogeological study. (assigned by LINFA). DDA. Lecce. 2004.
- General coordination, design, and environmental assessment study for the 17,000,000 kWh S. Rocco – Pontebba (Udine) hydroelectric power plant. Estimated cost of the project with a 4,000-meter open-pit pipeline and tunnel: €17.8 million. Udine, 2007-2009.
- Project coordination, Environmental Impact Assessment, and Landscape Report for the 1 MWe woody biomass power plant "CEMUR Plant" (San Leonardo, Udine). 2010-15.
- Market research and pre-feasibility study for the acquisition of large-scale hydroelectric power plants in Romania. Udine – Bucharest, Craiova, Cluj, Timishoara. 2012-20.
- Fluvial hydrological floodability model for the 5 MW electric photovoltaic park in the CEMUR Industrial Zone (San Leonardo, Udine). 2024-present.

4.3 - DRINKING WATER MANAGEMENT AND WATER RESOURCES, POLLUTION PROTECTION, BIG WATER CONTAMINATED EVENTS MANAGEMENT.

- Geoelectrical surveys (VES) for the GREEN HOTEL project in Magnano in Riviera. GEOCON srl, 1986.
- Geophysical-geoelectrical surveys (approximately 70 VES) for the search for groundwater in mountainous areas: survey campaign in the MUSI Valley (Lusevera – Udine). Master's thesis by G.P. DROLI – UNIVERSITY OF TRIESTE, 1986-87.
- Municipal solid waste incineration plant in Udine (via Gonars) and related works. Geological-technical analysis report. Tender, Ercole Martelli I.T. – C.E.D.A. (Milan), 1988.
- Geophysical-geoelectrical surveys (approximately 300 SEVs and electrical tomography) for the safety of the illegal landfill in Castellazzo Bormida (AL), subject to leachate leakage into the Bormida River. On-site hydrogeological-geoelectrical surveys aimed at delineating the perimeter of contaminated areas subject to anomalous deposits. Approximate cost of the work: £13 billion. Commissioned by IDROGEO s.r.l. (Trieste). 1990.
- Qualitative hydrogeological study of the catchment area of the Le Blaves-Thonon-les-Bains aqueduct intake structure (F). ECOLE DES MINES PARIS, 1990.
- Study for the drainage of the Soumont iron mine (F). ECOLE DES MINES PARIS, 1991.
- Mathematical Model of the Potable Groundwater of Fractured Carboniferous Limestone. Lille (F, B). (Mathematical Model of the Potable Groundwater of Fractured Carboniferous Limestone). ECOLE DES MINES PARIS, 1991.
- Environmental Pollution in Metal-Liferous Mining Regions of Bulgaria and Czechoslovakia. Hydrogeology, Models, and Health. EEC DG XII. R&D Program: Joint Research Proposal. R.G.D. Consortium Haarlem – Euromin. Proposal Program for the Hydrogeological Study, Modeling, and Management of Groundwater in Regions Polluted by Metal-Liferous Mining Activities in Bulgaria and Czechoslovakia. 1992.
- High-Speed Railway System Project, Bologna-Florence Section. On-site hydrogeological data collection campaign and hydrogeological study of the flows and vulnerability of the aquifers of the Emilian Variant. Collaboration with STUDIO BROILI for FIAT ENGINEERING spa. 1993.
- Integrated preliminary study of the water resources of the Friuli Venezia Giulia Region. Feasibility analysis, main issues, and preliminary management program. 1993.
- Design of the Musi aqueduct intake structure "Sorgenti del Torre" (Udine). Quantitative hydrogeological and geological-technical study. Tender tendered by the Consorzio Acquedotto Friuli Centrale. Group: Costruzioni

Cicuttin s.n.c. – Studio D'Orlando & Associati – Studio Geoeco. Project cost: approximately £1,500,000,000. Udine. 1993.

- Study of the aquifers of the Lower Friulian Plain: Integrated management and protection of water resource quality. Hydrogeological study and mathematical model – Phase 1. DDA. 1994.
- Application for a permit for large-scale water diversion: Integrated quantitative hydrogeological study of the water intake works of the Gemona Manifatture s.r.l. plant. Plant in Gemona (Udine). 1994.
- Hydrogeological study for the municipal drinking water well to be built in Sottoselva – Palmanova (Udine). 1995.
- Application for a permit for large-scale water diversion: Hydrological and hydrogeological-environmental study of the large-scale water diversion of the "Di Bert" farm. Porpetto (Udine). 1995.
- Application for a permit for large-scale water diversion: Hydrological and hydrogeological-environmental study of the large-scale water diversion of the "Collavini" farm. Bertiolo (Udine). 1995.
- Application for a concession for large-scale water diversion: Integrated quantitative hydrogeological study of the catchment works of the M. di G. Gorizia s.p.a. plant. Gorizia. 1995.
- Territorial organization of the integrated water service in the Province of Udine - Law 36/94, art. 8. Province of Udine – Department of the Environment. 1995.
- Hydrogeological study for the environmental remediation, vulnerability, protection, and artificial recharge project of groundwater in the Middle Friuli area – Friuli Venezia Giulia Region. 1996.
- Project for pedestrian railway underpasses in Latisana, capital: L.P. km 74+009, Railway Station, Via Sottopovolo. Geological-technical and hydrogeological report. Cost of works: £2,500,000,000. Latisana (Udine). 1996.
- Completion of urbanization works in the D2 industrial and commercial zone of Carpacco (Udine). Artificial groundwater recharge through surface water infiltration: Hydrogeological study and preliminary cost analysis. 1996.
- Application for a permit for large-scale water diversion: Hydrological and hydrogeological-environmental study of a large-scale water diversion from the "Azzurro s.r.l." fish farm. Rivoli di Osoppo (Udine). 1996.
- Quantitative hydrogeological study and numerical flow and transport model of the Zompitta Plain aquifer to optimize water withdrawals, assess aquifer vulnerability, and manage and protect the natural water resource intended for drinking by the City of Udine aqueduct. A.M.G.A. spa. 1997.
- Drafting of the regional legislation proposal (Friuli Venezia Giulia Region) "Prevention and management of contamination phenomena of natural water resources: risk factors, contaminant sources, crises – Operational framework for the Regional Authority, local authorities, health authorities, and regional water supply systems." 1997.
- Hydrogeological study for large-scale water diversion from the F.lli Martina & della Mea s.n.c. quarry and concrete mixing plant in Chiusaforte (Udine). 1997.
- Executive hydrogeological and geophysical study for irrigation water exploration in the Premariacco-Orzano plain. Borehole drilling and well flow measurements. LEDRA-TAGLIAMENTO LAND RECLAMATION CONSORTIUM – Udine. 1997.
- Project for an integrated management model for the aqueduct system of the Province of Udine. Hydrological and hydrogeological modeling of groundwater in the Upper Friulian Plain on the left bank of the Tagliamento River – Phase 1. Udine. 1997.
- Large-scale C.A.F.C. water diversion at the source of the Torre River for mixed hydroelectric and drinking water use in the Municipality of Lusevera. Executive quantitative hydrological and hydrogeological study. Estimated cost of the works: £15,000,000,000. Udine. 1998.
- Enhancement of water sources for irrigation following the lowering of the water table in the municipalities of Mereto di Tomba, Camino al Tagliamento, Mortegliano, and Codroipo. Quantitative hydrogeological study of the effects of project withdrawals on the drinking water sources of the Consorzio Acquedotto Friuli Centrale (C.A.F.C.). Udine. 1998.
- Executive design of the water monitoring network for the artificial groundwater supply system in the Middle Friuli area. Quantitative hydrogeological study (with modeling), location of the piezometric network, definition of the monitoring strategy, and definition of executive design parameters. Total project funding: £2,500,000,000. LEDRA-TAGLIAMENTO LAND RECLAMATION CONSORTIUM, 1998.
- Hydrological, hydrogeological, and territorial computerization of the Friuli Venezia Giulia Consortium Union. Organization, setup, and delivery of the hydrogeological and hydro-agronomic mathematical modeling system. Udine – Pordenone, LEDRA-TAGLIAMENTO LAND RECLAMATION CONSORTIUM, 2000.
- Hydrogeological study and optimization of the water intakes of the Pordenone City Aqueduct – Central Tower East. Groundwater monitoring, integrated design of the well system, emergency pumping system, and rehabilitation of existing wells. MUNICIPALITY OF PORDENONE, 2000.

- Construction of a large-scale diversion well for irrigation purposes in the municipality of Remanzacco (Udine) to meet the water needs of the Orzano and S. Giusto districts of the Ledra-Tagliamento Land Reclamation Consortium – Hydrological and hydrogeological study. Cost of work: approximately £300,000,000. Udine, 2000.
- Market research on private companies operating water purification and/or potabilization plants in the Veneto and Friuli Venezia Giulia regions. Udine, 2001.
- Technical opinion on the regulations regarding existing diversions without a permit for use: situation, risks, and solutions to the problem. Diversions in the LAZIO Region. Rome, 2001.
- Research, market analysis, and technical analysis on water strategies and drinking water services in Bulgaria. Udine - Sofia, 2002.
- Quantitative hydrogeological study of the Zompitta Plain aquifer to optimize drinking water withdrawals, aquifer vulnerability, and management and protection of the natural water resource for the City of Udine aqueduct (A.M.G.A.) – Convective-dispersive mathematical model for resource management (Phase 2). AMGA spa, 2002.
- Hydrogeological study for the "Via Oberdan" multi-storey car park in Pordenone. Supervision assignment for the Pordenone Municipal Administration. November 2003.
- Integrated hydrogeological study for the "Via Candiani" multi-storey car parks in Pordenone. Supervision assignment for the Pordenone Municipal Administration. Appointment as Technical Consultant at the Pordenone Court. November 2003.
- Hydrogeological study and optimization of water intakes at the mountain springs of the aqueduct of the Municipality of Verzegnis in the localities of Chiampomano, Ambiesta, and Rio Mal. Verzegnis (Udine), 2004.
- Friuli Venezia Giulia Water Protection Plan (PTA). Coordinator and head of the "Groundwater and Surface Water" Macro-area (data collection, regional hydrogeology and hydrology, study of regional river basins, water pollution and prevention strategies, regional numerical mathematical modeling of flow and transport, intrinsic, specific, and active vulnerability of regional aquifers, etc.). Temporary Association of Companies (ATI) led by Time Ambiente s.r.l.. FRIULI V. GIULIA AUTHORITIES REGION – ENVIRONMENTAL REGIONAL DEPARTMENT. 2004-2008.
- Groundwater drainage project at the RIZZANI DEECCHER construction site of the San Giorgio residential complex in Pordenone Centro "City Park". RIZZANI DEECCHER spa, 2008-2010.
- Structural Model of the Veneto Aqueducts: Quantitative, qualitative, and environmental hydrogeological studies, calculations, and assessments performed on behalf of the municipalities of the Middle Brenta area and the groundwater recharge area. MUNICIPALITIES OF THE Middle Brenta: Carmignano, Nove, Pozzoleone, MUNICIPALITIES IN THE PROVINCE OF Padua, 2006-15.
- Hydrogeological study, construction management, and groundwater retrieval at the 240-meter Pederobba well at the "La Madonna di Monfenera" site. Pederobba (Treviso). 2010-12.
- Technical Consultant for the Cassola Committee - Quantitative hydrogeological study of the project for the CASSOLA hazardous and non-hazardous waste treatment plant for the protection of the ETRA "S. Paolo" plant and public drinking well (Rossano Veneto - Cassola - Vicenza). 2013.
- Groundwater exploration for drinking and irrigation purposes in the NEW CAIRO CITY (population 2.500.000) – Hydrogeological and technical-plant pre-feasibility study. CAIRO (Egypt). PAGHERA spa, 2019-20.
- MINERAL AND SPRING WATER EXPLORATION at the "MALECCHI Spring – SOVICILLE (Siena)": Hydrogeological study for exploration permit. Sovicille – 2022-ongoing.

4.4 - LANDFILLS AND WASTE DISPOSAL FACILITIES, PROJECT-BASED EIA

- Graphical method for identifying homogeneous geo-environmental areas potentially suitable for controlled landfill use and for aquifer vulnerability assessments. 1990.
- Design and EIA for the Category 1 landfill in Pozzuolo del Friuli (Udine) in Cava Buttò. DDA. Integrated hydrogeological study and water pollution prevention study. 1994.
- Design for the Category 1 SOCECO landfill in Pozzuolo del Friuli (Udine), DDA. Quantitative hydrogeological, water pollution prevention, and additional geological-technical survey. 1995.
- Executive design for the expansion of the Category 1A landfill in Pozzuolo del Friuli. DDA. Quantitative geological and hydrogeological study. Permanent monitoring plan. Udine, 1997.
- Environmental impact study and design for the Category 2A North Asphalt Landfill in the municipality of Povoletto. DDA. Geological and hydrogeological study. Udine, 1999.
- Ferriere Nord Landfill – S. Maria la Longa. Hydrogeological analysis of the site. Definition of guidelines for the groundwater monitoring system and emergency response to be used in the event of groundwater contamination. S. Maria la Longa – Udine, 1999.

- Cases of leachate release at the E.X.E. Landfill in Trivignano. Analysis and additions to the "Emergency Management Plan," optimization of the groundwater monitoring system and hydrogeological well investigations. Trivignano (Udine). 2000.
- Pozzuolo del Friuli Landfill – Soceco s.r.l.. Geognostic and hydrogeological investigations, Hydrogeological study on the implementation of the monitoring network and optimal strategic use of water sampling procedures. Udine, 2001.
- Environmental Impact Study for the Udine (S. Gottardo) "Di là da Tor" landfill. DDA. Geological and hydrogeological study for pollution prevention. LINFA assignment. Udine, 2002.
- Environmental Impact Study for the dredging sludge storage tank facility in the Aussa Corno wastewater treatment plant in San Giorgio di Nogaro (Udine). DDA. Geological and hydrogeological study. LINFA assignment. Udine, 2002.
- Environmental Impact Study for the dredging sludge treatment plant in the Aussa Corno wastewater treatment plant in San Giorgio di Nogaro (Udine). DDA. Geological and hydrogeological study. LINFA assignment. Udine, 2002
- Environmental Impact Assessment for the Ecofelix municipal solid waste landfill in Carpeneto (Pozzuolo). DDA. Geological, climatic, hydrological, and hydrogeological study. Assigned to Eng. Cudini. Udine, 2003.
- Firmano Landfill (Udine): Hydrogeological study for the adoption of the provision pursuant to Article 8 of Ministerial Decree 471/99. Analysis report on the hazards of local emergencies and the vulnerability of aquifers. Specific in-depth reports. Udine, 2004-2005.
- Adaptation plan (pursuant to Legislative Decree 36/2003) and hydrogeological study of the contamination event near the Udine landfill known as the "Soceco Landfill" in Pozzuolo del Friuli (Udine). Environmental, geological, climatic, hydrological-hydrogeological, and hydrogeochemical study. Udine, 2004.
- Technical expert for the Court of Udine - Hydrogeological and environmental study of the "Romanello" MSW landfill in Udine. District Planning Authority (DDA). 2006-07.
- Technical expert for the Loria Popular Committees - Hydrogeological and environmental study of the "La Piccola" quarry and the LORIA landfill. District Planning Authority (DDA). 2007-15.
- Technical expert for SOCECO s.r.l. - Risk Assessment (R.A.M.), aquifer vulnerability, and hydrochemical analysis of the "Soceco" MSW landfill in the city of Udine. Pozzuolo del Friuli site. Udine, 2005-09.
- Technical Consultant for the Municipalities of BERGANTINO and MELARA (Rovigo) - Hydrogeological and environmental study of the 900,000 m3 asbestos landfill in Bergantino. DDA. 2014-16.
- Project for the completion of the MUS – Gestesco Landfill (Cividale del Friuli – Udine). Quantitative hydrogeological study to prevent groundwater contamination. 2015.
- Technical Consultant for the Court of Udine – Hydrogeological study for landslide events affecting homes in the Municipality of Tarcento. 2023.

4.5 - REMEDIATION, DECONTAMINATION WORKS OF CONTAMINATED SITES, MANAGEMENT OF DISUSED AREAS AT ENVIRONMENTAL RISK

- Hydrogeological and environmental analysis study for the remediation, general remediation, and prevention of hydrocarbon pollution of the E.N.E.L. San Giorgio lake, Viale Marconi, Pordenone. Commissioned by the Municipal Administration of Pordenone (Pordenone). 1997.
- Analysis and prevention and remediation plan for hydrocarbon pollution at the "Gruppo Distribuzione Petroli" site, Via Aquileia, 30 - Pordenone: hydrogeological study of contaminant transport, vulnerability, and identification of those responsible for the pollution, and definition of on-site remediation interventions. DDA. Commissioned by the Municipal Administration of Pordenone (Pordenone). 1997.
- Environmental monitoring and remediation interventions in the municipalities of Premariacco and Cividale del Friuli: "FIRMANO PULITA 1998" project. Water pollution control and prevention plan. Hydrogeological model and aquifer vulnerability. Preliminary design for aquifer remediation. Study of a standard provincial water contamination management model. Approximate project cost: £2.2 billion. Commissioned by the Provincial Administration of Udine. Udine. 1998.
- Study for the prevention of diffuse pollution, aquifer vulnerability, and water crisis management in the Province of Pordenone. Commissioned by the Provincial Administration of Pordenone and Tepco s.r.l. of Vittorio Veneto (Treviso). Pordenone. 1999.
- Environmental impact study for the demolition, remediation, and reconstruction of the former industrial site known as the "Ex-Cantoni Area" in Legnano (Milan). DDA. Hydrological and hydrogeological study, vulnerability of drinking water aquifers, geognostic and chemical-physical laboratory investigations, mitigation and prevention interventions and measures. Approximate cost of work: £120 billion. Milan. 2000.
- Emergency safety measures and site characterization plan (Ministerial Decree 471/99 – Annex A) for the Ponte Rosso Industrial Area Consortium (ZIPR), Area B. Planning of hydrogeological and hydrological

investigations, vulnerability of artesian aquifers, analysis and study of on-site interventions. S. Vito al Tagliamento (Pordenone). 2001.

- Characterization Plan (Level I), Reclamation Project (Ministerial Decree 471/99 – Annex A) for the Immobiliare Be.Ta. s.r.l. site in the Pramaggiore Industrial Zone. Planning of hydrogeological and hydrological surveys, analysis and study of on-site interventions (pursuant to Ministerial Decree 471/99). Pramaggiore (Venice). 2001.
- Groundwater contamination at the former Agricultural Consortium site in the Pordenone Centro area - Santin Skyscraper. Hydrogeological surveys, analysis and definition of technical strategies (pursuant to Ministerial Decree 471/99). Pordenone. 2004.
- Reclamation of the "Ex Cogolo" area in the Aussa Corno Industrial Zone (S. Giorgio di Nogaro – Udine). Characterization Plan. DDA. Planning and coordination of geological surveys, geological, hydrological, hydrogeological, hydrogeochemical, and groundwater vulnerability studies. Remediation project (pursuant to Ministerial Decree 471/99). Remediation project cost: €10.5 million. IVEM-GESTRADING srl, Udine. 2004-2007.
- Remediation of the “Fadalti - Sacile” area (Sacile – Pordenone). Characterization plan. DDA. Planning and coordination of geological surveys, geological, hydrological, hydrogeological, hydrogeochemical, and groundwater vulnerability studies. Remediation project (pursuant to Ministerial Decree 471/99). Udine. 2006-2007.
- Remediation of the “Domanins” area (S. Giorgio della Richinvelda – Pordenone). Characterization plan. DDA. Planning and coordination of geological surveys, geological, hydrological, hydrogeological, and hydrogeochemical studies (pursuant to Ministerial Decree 471/99). Udine. 2006-07.
- Characterization of the AGIP service area in Pordenone Centro. Pordenone 2006-07.
- Pollution of the “SME - Pordenone” industrial area. Characterization plan. DDA. Planning and coordination of geological surveys, geological, hydrological, hydrogeological, and hydrogeochemical studies (pursuant to Legislative Decree 152/2006). 2010-2014.
- Remediation of the “ILPEA s.p.a.” industrial area (Zoppola – Pordenone). Characterization plan. DDA. Planning and coordination of geological surveys, geological, hydrological, hydrogeological, and hydrogeochemical studies (pursuant to Legislative Decree 152/2006). Zoppola 2007-2015.
- PFAS GROUNDWATER REMEDIATION IN THE FORMER MITENI AND FORMER RIMAR AREA, Protection of drinking, irrigation, and spring groundwater and PFAS-PFOE POLLUTION REMEDIATION strategies for aquifers in the Veneto plain in the provinces of Vicenza, Padua, and Verona. MISO and Remediation Project, Mathematical hydrogeological model for predictive simulation for the management of pollutant flows and the design of mitigation interventions, West-South side monitoring project. Municipality of TRISSINO, 2020-ongoing.

4.6 - HYDROGEOLOGICAL-ENVIRONMENTAL STUDIES FOR INFRASTRUCTURE, EIA ON PROJECTS FOR MUNICIPAL, LARGE, AND COASTAL AREAS AT RISK

- Municipal Master Plan of the Municipality of Stregna (Udine). Geological-technical study attached to the Plan (containing the hydrogeological, landslide, and flood-prone hydrological study of the municipal areas). Municipal Administration of Stregna. 1995.
- Municipal Master Plan of the Municipality of Savogna (Udine). Geological-technical study attached to the Plan (containing the hydrogeological, landslide, and flood-prone hydrological study of the municipal areas). Municipal Administration of Savogna. 1995.
- Municipal Master Plan of the Municipality of Drenchia (Udine). Geological-technical study attached to the Plan (containing the hydrogeological, landslide, and flood-prone hydrological study of the municipal areas). Municipal Administration of Drenchia. 1995.
- General Municipal Master Plan of the Municipality of San Leonardo (Udine). Geological-technical study attached to the Plan (containing the hydrogeological, landslide, and flood-prone hydrological study of the municipal areas). Municipal Administration of San Leonardo. 1996.
- General Municipal Master Plan of the Municipality of Grimacco (Udine). Geological-technical study attached to the Plan (containing the hydrogeological, landslide, and flood-prone hydrological study of the municipal areas). Municipal Administration of Grimacco. 1996.
- Hydrogeological and hydrodynamic-sedimentary study of the coastal strip of Lignano Sabbiadoro (Udine) and surrounding areas. Coastal erosion prevention and environmental management of the coastline. 1996.
- Hydrodynamic, coastal, and sedimentary study of marine interventions. Detailed design for major construction projects on the coastline of Lignano Sabbiadoro, Pineta, and Riviera. Lignano (Udine). 1997.
- Hydrological-hydraulic study of the municipal area and interventions to prevent flooding and hydrogeological risks. Planning of surveys, synthesis, study, and general coordination. Lignano (Udine). 2001.

- Environmental Impact Study for the third lane of the A4 motorway, Villesse-Gorizia section. DDA. Climatic, hydrological, and hydrogeological study, groundwater vulnerability. LINFA assignment. Gorizia, 2003.
- Environmental Pre-feasibility Study for the renovation of State Road No. 56, Udine (Paparotti)-S. Giovanni al Natisone section. DDA. Study Manager, General Coordination, Geological, Climate, Hydrological, and Hydrogeological Study, Groundwater Vulnerability. Project Cost: €84,000,000. Udine, 2003.
- Flooding at the "Oberdan Parking" site in Pordenone. Hydrogeological analysis to verify the actions carried out by third-party companies and presented in the "Hydrogeological-Quantitative Study, Water Remediation and Building Subsidence Prevention Interventions." Resolution of critical issues identified during site drainage work. Pordenone, 2003.
- Flooding at the "Candiani Parking" site in Pordenone. Hydrogeological study to verify the actions carried out by third-party companies and presented in the "Hydrogeological-Quantitative Study, Water Remediation and Building Subsidence Prevention Interventions." Technical Consultant for the Municipality of Pordenone. Pordenone, 2004-2009.
- V.A.S. for the variant to the P.R.G.C. of the Municipality of Savogna (Udine). 2008-2009.

4.7 – RIVER REHABILITATION, WORK ON RIVERS AND SURFACE DRAINAGE NETWORK

- Variation no. 8 in the PDF of the Municipality of San Leonardo. Hydrological study for the management of flooding phenomena in the Cemur plain (erosion remediation, river protection works and embankments). (Municipal Administration of San Leonardo, Udine). 1988.
- Executive design for basic sports facilities in Scrutto. Hydrological study for the management of flooding phenomena in the Scrutto-Merso Sup. plain (erosion remediation, river protection works and embankments). (Municipal Administration of San Leonardo, Udine). 1988.
- Hydrological study and estimation of the probability of floods on the La Jasse basin-side. Montpellier (F). (Hydrological study and estimation of the probability of river flooding in the La Jasse basin). Montpellier (F). 1991.
- Executive project for interventions to address the instability of the Alberone River in the capital city of Savogna and construction of the Brizza Bridge. Hydrogeological study for the redevelopment of the Alberone River flood area, flood prevention measures, construction of the Brizza Bridge, and erosion protection in the Municipality of Savogna (Savogna Municipal Administration, Udine). 1995.
- Hydrological-hydrogeological study and plan for interventions to combat bank erosion and removal of groynes in the bed of the Alberone River in the Municipality of Savogna (Savogna Municipal Administration, Udine). 1995.
- Urgent Civil Protection interventions along the right bank of the Alberone River to eliminate the serious risk of flooding in the municipal capital and the locality of Blasin (Municipality of Savogna – Udine). Hydrogeological and geological-technical report. (Work cost: approximately £400,000,000. Municipal Administration of Savogna, Udine). 1999.
- Urgent interventions for hydraulic protection, surface water drainage, and remediation of the floodplains of the Cosizza and Erbezzo rivers along the Cemur Industrial Zone, Phase 1, in the municipality of S. Leonardo (Udine). DDA. Hydrological and geological study. Work cost: £1,650,000,000. S. Leonardo (Udine). 2000.
- Hydrogeological study aimed at remediating the hydrogeological instability caused by water inflows into the residential area of the "Costone di Scrutto" area, San Leonardo (Udine). Project cost: £750,000,000. (S. Leonardo, Udine) 2000.
- Hydrological and hydrogeological study for the definition of the surface and groundwater drainage plan and interventions in the Seima Italiana s.p.a. area – Tolmezzo Industrial Zone. Planning, supervision of geognostic surveys, and study. Tolmezzo (Udine). 2000.
- Study for the hydrological reorganization of the Tagliamento River in the areas at risk of severe flooding in the municipalities of Osoppo, Gemona, Bordano, Trasaghis, Venzone, and Ragogna. 2017-ongoing.
- Meteorological-marine and hydrological-sedimentary model for the elimination of hydraulic flood risk/hazard (PGRA 21-27, "Area P2" Basin Authorization) in LIGNANO – PUNTA TAGLIAMENTO (Udine) and approval for building. 2021-23.
- Hydrological-analytical model and elimination of hydraulic flood risk/hazard (PGRA 21-27 "Area P2" Basin Authorization) in BIBIONE Nord (Ve) for approval for building. 2021-24.
- Hydrological-numerical model and elimination of hydraulic flood risk/hazard (PGRA 21-27, "Area P2" Basin Authorization) in JESOLO CENTRO (Ve) with approval for building. 2022-23.
- Numerical HYDROLOCAL-HYDRAULIC MODELS for Hydraulic Compatibility Checks (PGRA 21-27 – River Basin Authority) at the following sites: Terme di LIGNANO P.ta Tagliamento (Udine), Bibione Commercial Area of S. Michele al Tagl. (Ve), Jesolo Centro (Ve), Jesolo Nord-Est (Ve), S. DONA' DI PIAVE Sud (Treviso), MUSILE DI PIAVE (Treviso), S. LEONARDO “Cemur” Industrial Area (Udine). Period 2021-ongoing.

- NUMERICAL RIVER MODELS for Hydraulic Compatibility Checks (PGRA 21-27 – River Basin Authority) for calculating the volumes of aggregate removal from the riverbed for river maintenance and safety projects: F. TAGLIAMENTO - Municipalities of S. DANIELE FRIULI, FORGARIA, RAGOGNA. 2023-2024.

4.8 - RIVER & HYDROGEOLOGICAL CRISIS, AND WORK ON LANDSLIDES, AVALANCHES, AND RISK-PROOF SLOPES

- Detailed design for rockfall and avalanche barriers in the Municipality of Drenchia. DDA. Geological study for prevention and intervention for the hydrogeological instability of Mount Colovrat, landslides, and avalanches. Project cost: approximately £3,000,000,000. Drenchia Municipal Administration, Udine. 1992.
- Remediation of the hydrogeological instability of the Tèssina landslide in the Municipality of Chies d'Alpago (Bl). Quantitative hydrogeological study. Tender tendered by the Veneto Region. Group: C.I.S.A s.p.a. - I.CO.P. s.p.a. – Studio D'Orlando & Associati – Studio Geoeco. Project cost: approximately £2,000,000,000. Belluno. 1994.
- Executive design for restoration and remediation of the landslide slope in the Vernassino-Costa area. Geological-technical report (study of the hydrogeological instability, remediation and slope prevention works). Project cost: approximately £250,000,000 (S. Pietro al Nat. Municipal Administration, Udine). 1995.
- Executive design for the hydrogeological and fluvial instability remediation works in the Brizza and Savogna areas. Hydrogeological and geological-technical report for the rehabilitation and remediation of the Brizza landslide. Project cost: approximately £500,000,000 (Savogna Municipal Administration, Udine). 1995.
- Executive design for the hydrogeological instability management works on the Peternel-Paciuch road in Rio Potoc. Geological-technical report (hydrogeological instability study, remediation works for the Paciuch landslide, and slope prevention). Project cost: approximately £150,000,000 (Drenchia Municipal Administration, Udine). 1997.
- Executive design for the landslide management works on the Iesizza-Raune road section. Geological-technical report (hydrogeological instability study, remediation works for the Iesizza landslide, and slope prevention). Project cost: approximately £200,000,000 (S. Leonardo Municipal Administration, Udine). 1997.
- Executive design for urgent rehabilitation works on behalf of the FVG Regional Civil Protection. on the Plataz-Canalaz landslide. Geological-technical report (study of the hydrogeological instability, landslide remediation and slope prevention works). Project cost: approximately £300,000,000 (Grimacco Municipal Administration, Udine). 1997.
- Executive design for the Bocchette di Calla landslide management works. Geological-technical report (study of the hydrogeological instability, landslide remediation and slope prevention works). Project cost: approximately £250,000,000 (Torreano Municipal Administration, Udine). 1998.
- Executive design for the landslide management works in the Municipality of Stregna in the areas of Cobilza-Podgora, Tribil Sup.-Bivio Podlach, Presserie-Tribil Sup. Geological-technical report (hydrogeological instability study, remediation of individual landslides and related roadworks, slope prevention). Project cost: approximately £455,000,000 (Stregna Municipal Administration, Udine). 1998.
- Hydrogeological study aimed at the rehabilitation and consolidation of landslides in the residential area and road network in the area known as "Costone di Azzida", San Pietro al Natisone (Udine). Project cost: £900,000,000. (S. Pietro al Nat., Udine) 1999.
- Hydrogeological study aimed at the rehabilitation and consolidation of landslides in Liessa, Grimacco Sup. (Municipality of Grimacco). Project cost: £600,000,000. (S. Pietro al Nat., Udine) 1999.
- Hydrogeological instability on a building in Montacuto (Ancona). Planning of geognostic surveys, analysis, hydrogeological and geological-technical study. Expert witness at the Court of Ancona (Ancona). 2001.
- Hydrogeological instability on a road in Barcaglione (Ancona). Planning of geognostic surveys, analysis, hydrogeological and geological-technical study. Expert witness at the Court of Ancona (Ancona). 2001.
- Executive design for rockfall and avalanche barriers in the Municipality of Drenchia. Geological prevention and intervention study for the hydrogeological instability of Mount Colovrat, landslides and avalanches, in the Drenchia Sup. and Zuodar areas. Project cost: approximately £600,000,000. Drenchia Municipal Administration, Udine. 2002.
- Pre-feasibility study for landslides, avalanches, and mountain defense for the Pontebba-Nassifeldpass Pramollo ski areas and a study for the "Alti" ski area in Tarvisio: geological, avalanche, hydrogeological, geostatic, and environmental analyses, technical-economic analysis of the interventions, study of design alternatives and their economic feasibility. Total estimated project cost: approximately €40 million (Province of Udine – CTS).
- Geostatic and hydrogeological study aimed at landslide, hydraulic, and hydrogeological remediation from rockfall and water ingress in the residential area known as "Costone di Scrutto", San Leonardo (Udine). Project cost: €0.75 million. (S. Leonardo, Udine) 2008-2017.

- Geostatic and hydrogeological study and plan for the restoration of the Sacrovint landslide on the Tagliamento River. Project cost approximately €0.15 million. Forni di Sotto (Udine). 2012-19.
- Geostatic and hydrogeological study and preliminary design for the rehabilitation of the two landslides on the Ruf de Vael and riverbed protection. Estimated project cost: approximately €2.5 million. Vigo di Fassa (Trento). 2016-17.
- Hydrological, hydrogeological, and forestry reorganization study and environmental screening for the project "Urgent civil defense interventions following the exceptional meteorological events of Storm VAIA in Friuli Venezia Giulia. Interventions in the municipalities of Pulfero, S. Pietro al Natisone, S. Leonardo, and Savogna on the Natisone, Cosizza, Erbezzo, and Alberone rivers." 2019-22. Project cost: €2.1 million.
- Hydrogeological, environmental, and technical-economic feasibility study for the rehabilitation of landslides, slopes, and riverbed damage along the Chiaradia River. 2020-ongoing. Forni di Sotto. Estimated value of works €1.7 million.

PUBLIC AND GOVERNAMENTAL AGENCIES, COMPANIES AND CLIENTS.

Natisone Valleys Mountain Community (Udine).
Paris National Higher School of Mines (Paris - France).
O.R.S.T.O.M. (Montpellier - France).
Udine Public Housing Institute (Udine).
University of Trieste. Institute of Geology (Trieste).
University of Udine. Department of Earth Resources and Territory (Udine).
University of Udine. Department of Crop Production and Agricultural Technologies (Udine).
Municipality of Moruzzo (Udine).
Municipality of Manzano (Udine).
Municipality of Palmanova (Udine).
Municipality of Savogna (Udine).
Municipality of San Leonardo (Udine).
Municipality of S. Pietro al Natisone (Udine)
Municipality of Drenchia (Udine)
Municipality of Grimacco (Udine).
Municipality of Stregna (Udine).
Municipality of Pulfero (Udine).
Municipality of Lignano Sabbiadoro (Udine).
Municipality of Latisana (Udine).
Municipality of Udine.
Municipality of Pordenone (Pordenone).
Municipality of Verzegnis (Udine).
Municipality of Lignano Sabbiadoro (Udine)
Municipality of Carmignano di Brenta (Padua).
Municipality of Nove (Vicenza).
Municipality of Pozzoleone (Vicenza).
Municipality of Vigo di Fassa (Tn)
Municipality of Forni di Sotto (Udine)
Municipalities of Forni di Sopra (Udine)
Municipality of Trissino (Vicenza), R.U.P. PFAS remediation procedure - Ex-Miteni, Ex-Rimar (Vicenza)
Municipalities of the Middle Brenta area of the Province of Padua.
Friuli Hill Community - Colloredo (Udine).*
Mountain Community of the Natisone Valleys (Udine).*
Province of Udine - Department of Environment and Territory (Udine).
Province of Pordenone - Civil Protection and Environmental Department (Pordenone).
Friuli Venezia Giulia Region, Regional Directorate of Health (Trieste).
Friuli Venezia Giulia Region - Regional Directorate of Environment (Trieste).
Friuli Venezia Giulia Region - Civil Protection Department (Trieste)
Ledra-Tagliamento Land Reclamation Consortium (Udine).
Central Friuli Aqueduct - CAFC (Udine).
City of Pordenone Aqueduct (Pordenone).
A.M.G.A. City of Udine Aqueduct (Udine).

ACEGAS s.p.a. Aqueduct (Trieste).
Court of Udine – Civil Section (Udine).
Court of Ancona – Civil Section (Ancona).
Agricultural Consortium of the Provinces of the Friuli Venezia Giulia Region (Udine).

CLIENTS: PRIVATE COMPANIES.

LAND SISTEMI SRL – Giorgio DEL FABBRO Architect (Udine)
Industrial Electronics s.p.a. (Milan).
Benedil s.p.a. (Cividale del Fr. - Udine).
L. Broili Geological Study (Tricesimo - Udine).
Castalia 2 s.p.a. (Genoa).
Idrogeo s.r.l. (Trieste).
SECAB - Soc. Elettrica Coop. Alto But (Paluzza - Udine).
Gemona Manifatture s.r.l. (Udine).
I.C.O.P. S.p.A. (Udine).
Felix s.r.l. (Udine).
C.I.S.A. S.p.A. (Pisa).
Cicuttin Costruzioni s.n.c. Latisana (Latisana - Udine).
M. di G. Gorizia s.p.a. (Gorizia).
Soceco s.r.l. (Udine).
T. & A. s.r.l. (Genoa).
Trader s.p.a. (Udine).
Nuova Azzurro s.r.l. (Verona).
S.A.I.S. s.r.l. - Zoppola (Pordenone).
Trote dell'Arzino - Forgaria nel Friuli, Pinzano (Pordenone).
Chiappo Mobili s.p.a. (Udine).
Compassi Gelindo Hydroelectric Company (Udine).
S.P.E.I. Hydroelectric Energy Production Company s.r.l. (Vicenza).
F.lli Martina & Della Mea s.n.c. - Chiusaforte (Udine).
Cartificio Ermolli s.p.a. - Moggio Udinese (Udine).
Gesteco s.p.a., Vetroresina Fiberdur Italia s.r.l. (Udine).
Tepco s.r.l. - Vittorio Veneto (Treviso).
Verdalpe s.r.l. – Enemonzo (Udine).
Orion s.r.l. – Rubano (Padua).
Gartner Sicurezza Ambientale s.r.l. – (Milan).
C.D.S. Immobiliare s.r.l. (Pordenone).
D. & F. ltd. Rome – Sofia (Bulgaria).
S.A.R.C. s.r.l. – Casarsa della Delizia (Pordenone).
S.E.I.M.A. Italiana s.p.a. – Tolmezzo (Udine).
PricewaterhouseCoopers s.p.a. (Milan).
Gartner Sicurezza Ambientale s.r.l. – (Rome).
I.A.L. Friuli V. Giulia (Pordenone).
LINFA s.r.l. (Udine).
Time Ambiente s.r.l. (Udine).
Studio Ingegneria Ing. M. CUDINI. (Udine).
Elettrostudio s.r.l. – Mestre (Venice).
GESTRADING s.r.l. (Venice).
IVEM s.r.l. (Venice).
S.I.L. s.p.a. - Società Imprese Lignano s.p.a. (Lignano Sabbiadoro).
Agritur s.r.l. (Latisana – Udine).
Cometa Energy s.r.l. (Bologna).
VIDONI s.p.a. (Udine)
REGNI Engineering Studio (Perugia)
ElectraWind (Brussels – B)
RIZZANI DE ECCHER s.p.a. (Udine).
Elettrostudio Energia s.p.a. (Mestre-Venice)
Monte Mare Grado s.r.l. (Varese)
GETUR EFA-ODA (Udine)

Sti Engineering s.r.l. (Udine)
Vivai Andriolo s.r.l. – Osoppo (Udine)
IKEA RETAIL ITALIA (Gorizia, Milan)
GME Aerospace (Curitiba – Brazil)
VISOTTO Supermarkets (Treviso)
SECIS s.r.l. Construction Company - Marcon (Ve)
ELETTROSTUDIO s.p.a. – Porto Marghera (Ve)
Collini Group, Super Beton, and Ravanelli spa – Amaro (Udine)
DE MONTE SERVICE s.r.l. – S. Daniele del Friuli (Udine)
ESE CEMUR s.r.l. (Mestre – Venice)
"LA MADONNA DI MONFENERA" (Pederobba – Treviso)

5) SPEAKER IN EDUCATIONAL ACTIVITIES AND CONFERENCES

Teaching at Universities and Public Institutes:

1. Teacher of the seminar for geology students (4 hours/year): "Mathematical Models in Hydrogeology: Management and Pollution of Groundwater," University of Trieste, Institute of Geology, Hydrogeology Course (teacher: Prof. Giorgetti F.): Trieste, 1992, 1993, 1994, 1995, 1996.
2. Teacher of the seminar for geology students (4 hours/year): "Groundwater: Investigations, Tests for Parameter Definition, Free Water, Aquifer Sizing and Characterization, Mathematical Models." University of Trieste, Institute of Geology (teacher: Prof. Cucchi F.). Trieste: 2003, 2004, 2005, 2006.
3. Teacher of the specialization seminar for engineers (10 hours): "Water Crisis Management and Public Health," Master of Advanced Engineering (I.S.I.G.E.) - Ecole des Mines de Paris, Fontainebleau (F), 1997.
4. Teacher of the Civil Protection course (12 hours): "Crisis Management and the Problem of Water Supply During Disasters," I.A.L. Friuli V. Giulia. Pordenone: 2002, 2004, 2005.
5. Teacher of the Specialization Course in Chemical-Environmental Engineering (6 hours): "Aquifer Management, Protection and Prevention of Contamination." University of Padua – Faculty of Engineering (course instructor: Prof. Scaltriti G.). Padua, 2003.
6. Lecturer at the ENAIP course preparing for the Regional Competition for Technical Managers (engineers, architects, geologists) (8 hours): "Geology, geotechnics, hydrogeology, hydrology, environmental protection, Law 36/94 (the so-called "Galli Law"), Legislative Decree 152/99 (the so-called "Consolidated Act on Water"), Ministerial Decree 471/99 (the so-called "Reclamation Law")." Trieste, 2004.
7. Lecturer at the Province of Belluno course (for provincial employees of the Environment and Reclamation Department) (4 hours): "Pollution and Reclamation Interventions Using Hydrogeological-Mathematical Models in Mountain Areas." Belluno, 2005.
8. Lecturer at the University of Trieste, degree program in Geological Sciences: "Geological and Environmental Regulations." Trieste, 2007.
9. Creator and instructor of the ongoing course for employees of the Regional Offices and ARPA FVG called "AREAT - Water, Waste, Energy, Environment, Territory," organized with Linfa s.r.l. and INSIEL s.p.a. Udine and Trieste, 2008-2017.
10. Master's Degree in "Integrated Water Service Management" for public officials and water managers – University of Udine – Currently being planned. Udine, 2019-2020.

Speaker at the following conferences and master's programs on water, hydrogeology, and geothermal issues:

1. Study for the development of the three-year waste program. Presentation title: "Definition of the methodology for identifying sites suitable for controlled landfill use." Ecoistituto A. Peccei - Friuli Venezia Giulia Region. Udine, 1990.
2. The environmental problem of the Caneva landfill. Municipality of Tolmezzo. Tolmezzo (Udine), 1990.
3. Mathematical model of the carboniferous limestone nappe. University "Paris VI" Pierre and Marie Curie. Paris (F), 1991.
4. Environmental restoration of the Italcementi Vernasso quarry. Ecoistituto A. Peccei. Cividale del Friuli (Udine), 1992.
5. Mathematical modeling for groundwater management. G.S.I.S.R.. Milan, 1993.
6. Groundwater management: the case study of the Lille region (F). Italian Hydrotechnical Association, Friuli Venezia Giulia section. Udine, 1993.

7. Water resources: a resource to be protected. Management and pollution of water resources in the Friuli Venezia Giulia region. Municipality of S. Giorgio di Nogaro. S. Giorgio di Nogaro (Udine), 1993.
8. Management and pollution of water resources in the Friuli Venezia Giulia region. Municipality of Porpetto. Porpetto (Udine), 1993.
9. Clear, fresh, sweet waters. Water Well Protection Committee. Presentation title: The hydrogeology of the Friuli Venezia Giulia lowlands and the protection of artesian aquifers. Cervignano (Udine), 1994.
10. Advanced methods for groundwater pollution control. Civil Defence Friuli Venezia Giulia Region. Presentation title: Error management in hydrogeological-mathematical modeling. C.I.S.M., Friuli Venezia Giulia Civil Protection. Udine, 1994.
11. Quality control and management of underground drinking water resources. Presentation title: Proper management of underground drinking water resources: the decisive role of hydrogeological-mathematical modeling and rules for appropriate use. G.S.I.S.R.. Milan. 1994.
12. Collection of hydrogeological data and current knowledge on wells and aquifers in the Lower Friulian Plain. Series of 15 conferences in several municipalities of the Lower Friulian Plain (Udine). University of Udine, Department of Georesources and Territory. 1994-95.
13. Aquifers of the Friulian Plain: protection and use of the resource. San Vito la Tagliamento Committee for the Defense of the "Water Heritage". San Vito la Tagliamento (Pn), 1995.
14. Water intended for human consumption. Presentation Title: Monitoring the Efficiency of Natural Aquifer Systems. G.S.I.S.R.. Milan, 1995.
15. Tap Water or Mineral Water? Quality, Legislative, Regulatory, and Economic Aspects. G.S.I.S.R.. Presentation Title: Water Use in Mountain Aquifers: Some Operating Principles and Optimal Collection Systems. Milan, 1995.
16. Mineral Waters 1st International Congress - "Legislation, Quality Control, and Production." Presentation Title: Hydrogeological-Mathematical Modeling: Its Role in a Hydro-Mineral Resource Management Strategy and Rules for Appropriate Use. S.S. Hygiene and Preventive Medicine, University of Pisa. Florence, 1996.
17. The Importance of Natural Aquifers: A First Decisive Step Toward the Implementation of Galli Law No. 36/94. A.M.G.A. - Municipality of Udine, 1995. G.S.I.S.R., Milan 1997.
18. Prevention and management of the risk of pollution of natural waters (aquifers, rivers, lakes, seas). Report Title: Water pollution prevention: costs, immediate and medium- to long-term benefits. Proposal for risk management. G.S.I.S.R.. Milan, 1997.
19. Galli Law and Consolidated Law: new strategies for integrated water management. Report Title: Proposal for technical regulations for the optimal management of water crises and natural water contamination. G.S.I.S.R.. Milan, 1998.
20. The Galli Law and its practical application in Friuli Venezia Giulia. Report Title: The hydrography of the Optimal Territorial Area of the province of Udine, available water resources, and current territorial issues. Ord. Provincial Engineers of Udine and the Provincial Department of Ecology. Udine, February 4, 1999.
21. Underground water resources. Report title: Management of contamination emergencies: strategic interventions at the scale of individual emission sources, operational schemes to be used during water crises. G.S.I.S.R., Milan, February 22, 1999.
22. Land management: hydrogeological risk and remediation of contaminated sites. Report title: The systematic approach to hydrogeological risk management: structural protection, interventions in at-risk areas, prevention of individual landslides. G.S.I.S.R., Milan, February 26, 1999.
23. Presentation of the "Artificial replenishment project for the Middle Friuli area: analysis and hydrogeological parameters of the project works." Italian Hydrotechnics Association, Section Friuli Venezia Giulia – University of Udine, Faculty of Engineering – Department of Georesources and Territory. Udine, November 17, 1999.
24. Protection of drinking water resources within the framework of the Risk Forecasting and Prevention Plan of the Province of Pordenone. Civil Protection Department of the Province of Pordenone. Pordenone, 20/11/1999.
25. Water protection and management: relevant provisions in light of the new Legislative Decree 152/99, "Consolidated Law on Water." Report Title: A new concept of groundwater vulnerability: "Active Vulnerability." An operational tool for protection and emergency response. G.S.I.S.R., Milan, 25/02/2000.
26. Water intended for human consumption: drinking water quality and legislative developments. Report Title: Artificial recharge of an aquifer used for drinking purposes: a methodology for the optimized use of a natural basin and the increase of derived flow rates. G.S.I.S.R., Milan, February 24, 2000.
27. 12-lesson course for artisans and small businesses: "Collection and transport of non-hazardous urban and special waste." – Lesson title: Elements of ecology and environmental safety. Unione Artigiani e Piccole Imprese del Friuli V. Giulia (UAF), Udine, July 5, 2000.
28. The phenomenon of solid transport and riverbed interventions pursuant to Law No. 183 of May 18, 1989, and Law No. 267 of August 3, 1998. Presentation title: "The operational needs of mountain municipalities: on-site interventions and landslide prevention strategies at the local level." Province of Udine, Environmental Protection

Service, Udine, October 25, 2000.

29. Water intended for human consumption - Regulations, management, treatment, and use. Presentation title: Aquifer protection: the transition from passive monitoring to active on-site intervention. G.S.I.S.R., Milan, February 15, 2001.
30. Water protection from pollution – Regulatory developments and management aspects. Presentation title: Groundwater protection from pollution in sensitive areas: an operational strategy for the design and advanced use of monitoring piezometers. G.S.I.S.R., Milan, February 16, 2001.
31. Polluted sites: legal and administrative aspects, obligations, compliance, solutions. Presentation title: The effects of pollution on water bodies: the conceptual model, monitoring criteria, and principles for on-site intervention strategies. Consorzio Z.I. Ponte Rosso, S. Vito al Tagliamento, February 22, 2001.
32. Hydrogeological instability – risk management and land-use planning. Report title: The "Water Factor": Structural Protection of the Territory and Interventions in At-Risk Areas. G.S.I.S.R., Milan, 4/4/2001.
33. Water intended for human consumption: Management and Protection of Water Resources and Water Quality. Report title: Water Saving Begins with Proper Management of Productive Aquifers: Interventions to Optimize Groundwater Withdrawals and Protect Against Contamination. G.S.I.S.R., Milan, 1/3/2002.
34. Local Development Forum for the Cividale and Natisone Valleys Area (Udine). Report title: The Feasibility and Profitability of Small Hydroelectric Power Plants. Natisone GAL, Friuli Venezia Giulia Region. Torreano (Udine), 18/3/2002.
35. The European Waste Code (EWC) and Landfills Following the New EU Waste Management Regulations. Presentation Title: Evolution of preliminary investigations and landfill design criteria from Legislative Decree 22/97 to the present: tools for improving environmental performance. G.S.I.S.R., Milan, 7/05/2002.
36. Food processing during natural disasters: emergency management, crisis management, and the problem of drinking water during disasters. I.A.L. FRIULI V. GIULIA, 12-hour course. Pordenone, October-November 2002.
37. Water intended for human consumption. Presentation Title: Urgency and destabilization resulting from a major water crisis: management criteria, applications, and relevance of the "Atrazine Case" in the Friulian Plain (1996-97). G.S.I.S.R., Milan, 31/01/2003.
38. Modeling applied to aquifers: remediation of contaminated sites and management of drinking water resources. Report title: Case study of an integrated hydrogeological-mathematical model and emergency management. G.S.I.S.R., Milan, 22/05/2003.
39. Landfills: one year after the entry into force of Legislative Decree 36/2003. Report title: Measures, procedures, and guidelines for the prevention and reduction of negative impacts on water resources. G.S.I.S.R., Milan, 10/02/2004.
40. Eco-management in the Integrated Water Service: elements for environmental certification. Report title: Protection and management of natural water resources: sources of drinking water supply. Polytechnic University of Milan – “Wastewater Treatment Plant Management” Working Group, Como, 2/04/2004.
41. Legislative Decree 152/99, interpretation and implementation. Report title: Groundwater. G.S.I.S.R., Milan, April 22, 2004.
42. Wind energy: Which way the wind blows in Italy. Presentation title: Projects with high environmental and social impact: building consensus, the technical approach, and the main critical issues. Association of Renewable Energy Producers (APER), Milan, April 22, 2004.
43. Landfills: Emerging administrative and management issues for adapting facilities to Legislative Decree 36/2003. Presentation title: Protecting groundwater from pollution: sampling strategies, piezometers, risk analysis, emergency response plans. G.S.I.S.R., Milan, February 22, 2005.
44. Simulations of groundwater flow and contaminant transport. Presentation title: Recharge and protection of an aquifer in the Udine area: data, mathematical model of flow and transport, design, management. ESI Italia, Padua, April 20, 2005.
45. Environmental Risk Analysis – Assessments, Management, and Applications. Report Title: Practical Case of a MSW Landfill: Risk Analysis Through Analytical Simulation of Manganese, Ammonia, Nitrates, and Chlorides Contamination. G.S.I.S.R., Milan, July 4, 2005.
46. Sampling of Surface and Groundwater and Sediments – Methods, Issues, and Application Experiences. Report Title: Groundwater Sampling: Methods and Issues. G.S.I.S.R., Milan, July 5, 2005.
47. Waste-to-Energy Incineration: Regulations, Management, Technologies, and Environmental Control. Report Title: Interventions with a Strong Socio-Environmental Impact: Building Consensus among the Public and Local Authorities. G.S.I.S.R., Milan, February 14, 2006.
48. Risk Analysis: The RISC4 Method Procedure. Presentation Title: Hydrogeological Variables and the Mathematical-Analytical Calculation Approach. Order of Geologists of Friuli Venezia Giulia, Udine, February 2, 2007.
49. The Innovations Introduced by Legislative Decree 152/2006 on the Remediation of Contaminated Sites:

Regulatory Framework and Technical Criteria for Application. Presentation Title: Risk Analysis, the Gradual Approach, and Building Consensus in Public Administrations. G.S.I.S.R., Milan, February 26, 2007.

50. The Remediation of Contaminated Areas. Consensus Management and Cost Optimization in Light of the 2nd Amendment to Legislative Decree 152/2006. GEOECO/LINFA/INSIEL. Udine, February 18, 2008.
51. Remediation of contaminated areas. Risk Analysis. 2nd Corrective to Legislative Decree 152/2006. GEOECO/LINFA/INSIEL. Trieste, Udine, Nov. 2008 – Jan. 2009.
52. Advanced techniques in the management of "difficult" contaminated sites. Report title: Maximum results and minimum effort for acquiring chemical-hydrogeological parameters and for emergency management. G.S.I.S.R., Milan, 2/07/2009.
53. "Risk Assessment: evaluation of environmental pollution risks and effects on human health." Report title: "Management and prevention of a serious hydro-environmental crisis in the Zoppola-Pordenone Industrial Zone: risk control in the "acute" phase, methods and decisions for a successful intervention." G.S.I.S.R., Milan, 2/05/2010.
54. "Integrated Water Service Management: Analysis of the Current Situation and New Horizons." Presentation title: "Maximizing "billable" water flow and preventing pollution of the aqueduct's drinking water aquifers: operational framework, design criteria, cost-benefit calculations, payback periods." G.S.I.S.R., Milan, 3/05/2010.
55. "Standards and Techniques for Water, Soil, and Air SAMPLING." Presentation title: "Groundwater and Surface Water Sampling." G.S.I.S.R., Milan, 13/10/2010.
56. "Risk Assessment – Evaluation Methods for the Environment and Humans." Presentation title: "Risk Assessment in the Approval of Complex Environmental Projects: The General Methodology and the Case of the "Deep Hydro-Geothermal Field of Lignano (Udine)"." GSISR, Milan, February 22, 2011.
57. "Geothermal Energy: Current Projects and Prospects." Titles of papers presented: 1) Hot water stored in underground aquifers: the hydrogeological feasibility of interventions, water recharge, and the availability of geothermal heat. 2) The SIL SPA Deep Geothermal Project in Lignano Sabbiadoro (Udine): A "Calculated" Success. AESSE CONGRESS. Milan, October 6, 2011.
58. "Energy Supply Chains – GEOTHERMAL ENERGY." Presentation title: "The Technical and Economic Feasibility of Geothermal and Geothermal Power Plants: Parameters and Critical Issues." Trieste International Foundation. Trieste, October 24, 2012.
59. SEP ENERGY Padua, March 19-22, 2013. GEOECO organized the study day "GEOTHERMAL ENERGY FOR MEDIUM AND LARGE ENTERPRISES: INNOVATIONS AND APPLICATIONS WITH WELL WATER WITHDRAWAL TO REDUCE ENERGY COSTS." Presentation title: "Deep geothermal water: an inexhaustible resource, zero-impact energy, the guarantee of "calculated and planned withdrawal," Padua, March 22. 2013.
60. FVG Water Protection Plan – Groundwater and Surface Water – Order of Geologists of FVG, Groundwater and Surface Water Working Group, Coordinator G.P. DROLI – Pordenone, 22/05/2015.
61. Geothermal resources: environmental, technical, and regulatory limits for responsible use – Order of Geologists of Trentino-Lombardy-Veneto-Friuli-Emilia Romagna and the Rovereto Civic Museum Foundation. Rovereto, Trento (I). Presentation title: "Deep geothermal energy: geophysics and geology for technical and economic forecasts of energy production in carbonate aquifers." Rovereto (Tn), 2 December 2016.
62. GEOECO organized the study day "Energy for all: opportunities for citizens and businesses. EFD2 Europe of Direct Democracy" presenting the report "The regulatory push for Renewable Energy Sources." Udine, April 28, 2017.
63. Geothermal Energy and Hydrogeological-Geothermal Modeling with FREEWAT-MT3D – "Artificial Recharge of the AMGA-UDINE Drinking Water Aquifer. Hydrogeological-Numerical Model for Management of Groundwater Withdrawals and Pollution" - XII Conference of the GIT Gavorrano GR – Italian Geological Society and La Sapienza University (Rome) – June 12-14, 2017.
64. GEOECO, with the Municipality of Vigo di Fassa, organized the study day "The Dolomites: Prevention, Land Management, and Natural Risks," presenting the report "Project for the Management of the Ruf de Vael Landslide." Municipality of Vigo di Fassa (Trento – Italy). October 7-8, 2017.
65. Geothermal Energy – GEMex Informative Event – CNR Campus – Pisa, March 27, 2018.
66. Geothermal Energy DESCRAMBLE Final Conference – CNR, EGEC Brussels – Pisa – Florence, March 28, 2018.
67. 2nd Meeting on Geothermal Energy: Thermal Uses - Thermal Renewables for Efficient and Effective Land Development and as a Response to Pollution in Urban Centers. Milan. March 21, 2019.
68. The Artificial Recharge of an Urban Drinking Water Aquifer (Udine – Italy): A Digital Model to Increase Water Flow from Wells, Project the Pollution Protection Works, and Optimize Cost-Benefits. 46th IAH Congress – Malaga – September 23, 2019.
69. "UDINE, CITY OF WATER – A BEAUTY THAT IS REBORN" – Creator and organizer of the conference of the ENVIRONMENT AND ENERGY Working Group – a permanent think tank of the Municipality of Udine. Palazzo del Popolo – Udine. November 7, 2019.

70. MASTER'S DEGREE on Public Water Management: "Sustainability and Innovation of the Integrated Water Cycle" – University of UDINE: lectures on the FRIULI V. GIULIA Water Protection Plan (2008) and on the Protection and Decontamination of Aquifers Used for Drinking Water. University of UDINE. March-June 2020.
71. The Problem of Old Landfills Causing Groundwater Leachate to Break Down: The Hydrogeological Strategy of Analysis-Reaction-Action at "Time Zero" – FareAmbiente, SICILY Region. Palermo, November 15, 2019 (proceedings submitted, conference postponed to 2020).
72. The Geology and Waters of the Monte MATAJUR-COLOVRAT Group. Public Meetings of the Municipalities of DRENCHIA and SAVOGNA (Udine). 2022-24.

6) MAIN PUBLICATIONS AND ARTICLES

1. Droli G.P., Carulli G.B., Giorgetti F.: Geophysical investigations in the Torre Valley (excerpt from thesis). Rassegna Tecnica Friuli V. Giulia, no. 6/88.
2. Droli G.P.: Proposed methodology for the identification of sites potentially suitable for controlled landfills. Proceedings of the National Conference for the presentation of the "Study for the development of the three-year regional waste program", E.N.E.A. – Amici della Terra, Udine 10/03/1990.
3. Droli G.P., Combes P.: Drinking water supply in the Lille region (France): Mathematical model for the management of the karst aquifer of the Carboniferous Limestone. Proceedings of the Conference "Water for Drinking Use", G.S.I.S.R. Milan, 1993.
4. Droli G.P.: Proper management of underground drinking water resources: the crucial role of hydrogeological-mathematical modeling and the rules for appropriate use. Proceedings of the conferences: "Water for drinking use," G.S.I.S.R. Milan, 1994 and "Mineral waters 1st International Congress - Legislation, quality control, and production." S.S. Hygiene and Preventive Medicine, University of Pisa. Florence, 1996.
5. Droli G.P.: Monitoring the efficiency of natural aquifer systems. Proceedings of the conference "Water intended for human consumption," G.S.I.S.R. Milan, 1995.
6. Droli G.P.: Water use in mountain aquifers: some operating principles and optimal collection systems. Proceedings of the conference "Tap water or mineral water?" G.S.I.S.R., Milan, 1995.
7. Camoli L., De Cecco M., Droli G.P., Truant P.: Territorial Organization of the Integrated Water Service in the Province of Udine (Law 36/94, Art. 8). Department of Ecology of the Province of Udine - Published Report, Udine, 1996.
8. De Cecco M., Droli G.P.: Integrated Water Resources: What Future for the Province of Udine?. Julia Augusta, Year IV, No. 1. Udine, 1996.
9. Droli G.P.: Water Pollution Prevention: Costs, Immediate and Medium- to Long-Term Benefits. Risk Management Proposal. Proceedings of the Conference "Prevention and Management of the Risk of Pollution of Natural Waters" G.S.I.S.R., Milan, 1997.
10. Droli G.P.: Proposal for Technical Regulations for the Optimal Management of Water Crises and Natural Water Contamination. Proceedings of the Conference "The Galli Law and the Consolidated Law: New Strategies for Integrated Water Management." G.S.I.S.R. Report No. 60-10/98, Milan 1998.
11. Droli G.P.: The Systematic Approach to Hydrogeological Risk Management: Structural Protection of the Land, Interventions in At-Risk Areas, Prevention of Single Instability. Proceedings of the Conference "Land Management: Hydrogeological Risk and Remediation of Contaminated Sites." G.S.I.S.R. – University of Brescia, Milan, 1999.
12. Droli G.P.: A New Concept of Groundwater Vulnerability: "Active Vulnerability." An operational tool for protection and emergency response. Proceedings of the conference: "Water Protection and Management." G.S.I.S.R., Milan, 2000.
13. Droli G.P.: Artificial recharge of an aquifer used for drinking purposes: a methodology for the optimized use of a natural basin and the increase of derived flow. Proceedings of the conference: "Water intended for human consumption: drinking water quality and legislative developments." G.S.I.S.R. - University of Brescia, Milan, 2000.
14. Droli G.P.: Protecting aquifers from contamination: the transition from passive control procedures to active on-site intervention procedures. Proceedings of the conference: "Water intended for human consumption - Regulations, management, treatment, and use." G.S.I.S.R. – University of Brescia, Milan, 2001.
15. Droli G.P.: Water saving begins with proper management of productive aquifers: interventions to optimize groundwater withdrawals and protect against contamination. Proceedings of the Conference "Water intended for human consumption: management and protection of water resources and water quality." G.S.I.S.R., Milan, 2002.
16. Droli G.P.: Evolution of preliminary investigations and landfill design criteria from Legislative Decree 22/97 to the present: tools for improving environmental performance. Proceedings of the Conference "The European

Waste Code (EWC) and Landfills after the New Community Provisions on Waste Management," G.S.I.S.R., Milan, 2002.
17. Droli G. P.: Urgency and Destabilization Resulting from a Major Water Crisis: Management Criteria, Applications, and Current Relevance of the "Atrazine Case" in the Friulian Plain (1996-97). Proceedings of the Conference "Water Intended for Human Consumption: Management and Health Aspects." G.S.I.S.R., Milan, 2003.
18. Droli G. P.: Case Study of an Integrated Hydrogeological-Mathematical Model and Emergency Management. Proceedings of the Conference "Modeling Applied to Aquifers: Remediation of Contaminated Sites and Management of Drinking Water Resources." G.S.I.S.R., Milan, 22/05/2003.
19. Droli G.P.: Measures, procedures, and guidelines for the prevention and reduction of negative impacts on water resources. Proceedings of the conference "Landfills: one year after the entry into force of Legislative Decree 36/2003." G.S.I.S.R., Milan, 10/02/2004.
20. Droli G.P.: Protection and management of natural water resources: sources of drinking water supply. Proceedings of the conference "Eco-management in the Integrated Water Service: elements for environmental certification." Polytechnic University of Milan – "Wastewater Treatment Plant Management" Working Group, Como, 2/04/2004.
21. Droli G.P.: Projects with high environmental and social impact: building consensus, the technical approach, and the main critical issues. Proceedings of the conference "Wind energy: which way does the wind blow in Italy?" Assoc. Renewable Energy Producers (APER), Milan, April 22, 2004.
22. Droli G.P.: Protecting groundwater from pollution: sampling strategies, piezometers, risk analysis, emergency response plans. Proceedings of the conference "Landfills: Emerging administrative and management issues for the adaptation of facilities to Legislative Decree 36/2003." G.S.I.S.R. - University of Brescia, Milan, February 22, 2005.
23. Droli G.P.: Practical case of a MSW landfill: risk analysis through analytical simulation of contamination by manganese, ammonia, nitrates, and chlorides. Proceedings of the conference "Environmental Risk Analysis – Assessments, Management, and Applications." G.S.I.S.R., Milan, July 4, 2005.
24. Droli G.P.: Groundwater Sampling: Methods and Issues. Proceedings of the Conference "Sampling of Wastewater, Surface Water, and Groundwater and Sediments – Methods, Issues, and Application Experiences." G.S.I.S.R., Milan, July 5, 2005.
25. Droli G.P.: Risk Analysis, the Step-by-Step Approach, and Building Consensus in Public Administrations. G.S.I.S.R., Milan, February 26, 2007.
26. Collivignarelli C., Droli G.P. et al.: Eco-Management in Integrated Water Services: Elements for the Application of the ISO 14001:04 Standard. Water Supply Sources. Aracne editrice s.r.l., Rome, 2007.
27. Droli G.P.: The Remediation of Contaminated Areas. Risk Analysis. 2nd Amendment to Legislative Decree 152/2006. GEOECO/LINFA/INSIEL. Trieste, Udine, Nov. 2008 – Jan. 2009.
28. Droli G.P.: Advanced techniques in the management of "difficult" contaminated sites. Presentation title: Maximum results and minimum effort for acquiring chemical-hydrogeological parameters and for emergency management. G.S.I.S.R., Milan, 2/07/2009.
29. Droli G.P.: Maximum results and minimum effort for acquiring chemical-hydrogeological parameters and for emergency management. G.S.I.S.R., Milan, 2/07/2009.
30. Droli G.P.: Management and prevention of a serious hydro-environmental crisis in the Zoppola-Pordenone Industrial Zone: risk control in the "acute" phase, methods and decisions for a successful intervention. G.S.I.S.R., Milan, 2/05/2010.
31. Droli G.P.: Maximizing "billable" water flow and preventing pollution of the aqueduct's drinking water aquifers: operational framework, design criteria, cost-benefit calculation, payback periods. G.S.I.S.R., Milan, 3/05/2010.
32. Droli G.P.: Groundwater and surface water sampling. Proceedings of the G.S.I.S.R. Conference, Milan, 13/10/2010.
33. Droli G.P.: Risk assessment in the approval of complex environmental projects: the general methodology and the case of the "Deep hydro-geothermal field of Lignano (Udine). Proceedings of the GSISR Conference, Milan, 22/02/11.
34. Droli G.P., Zanin Piero Mauro: Hydrogeological-Mathematical Model of a Complex Multilayered Aquifer: The Case of the Upper and Lower Friulian Plain Aquifers. Technical Review of Friuli Venezia Giulia. Udine, no. 3 and no. 4 – Udine. 2011.
35. Droli G.P.: The Technical-Economic Feasibility of Geothermal and Geothermal Power Plants: Parameters and Critical Issues. Published on the website of the Trieste International Foundation. Trieste, October 24, 2012.
36. Droli G.P.: Deep geothermal waters: an inexhaustible resource, zero-impact energy, the guarantee of “Calculated and Planned Withdrawal,” Proceedings of the SEP Conference - Padua, March 22, 2013.
37. Droli G.P.: Deep Geothermal Energy: Geophysics and Geology for Technical and Economic Forecasts of Energy Production in Carbonate Aquifers. Proceedings of the Conference of the Order of Geologists of Trentino-

Lombardy-Veneto-Friuli-Emilia Romagna and the Rovereto Civic Museum Foundation. Rovereto, Trento (I). December 2, 2016.

38. The Dolomites: Prevention, Land Management, and Natural Risks. “Project for the Management of the Ruf de Vael Landslide.” Municipality of Vigo di Fassa (Trento – Italy). Proceedings of the Vigo di Fassa and Val di Fassa Conference, October 7-8, 2017.
39. The artificial recharge of an urban drinking water aquifer (Udine – Italy): a digital model to grow the water flow from wells, project the pollution protection works, optimize the cost-benefits. Report of 46th IAH Congress – Malaga (E) – 23 Sept. 2019.
40. The problem of the breakdown of old landfills with contamination of groundwater by leachate: the hydrogeological strategy of "Analysis-Reaction-Action at zero time" – Fare Ambiente, Sicilian Region. Palermo, 15 November 2019.

Udine (Italy), June 2025

G. P. DROLI