

GIORGIO PEZZETTI / COVER LETTER



Born in Bergamo, Italy in 1954, he graduated from “Politecnico di Milano” University in 1979 with a degree in Civil Engineering.

In 1980 he joined the Structural Division of ISMES (Istituto Sperimentale Modelli e Strutture – Experimental Institute for Models and Structures), an applied research institute belonging to Enel, - the largest power company in Italy. He was in charge of laboratory and in situ tests on structures and structural elements.

In 1982, he joined the newly established Geotechnical Instrumentation and Investigations where he focused on instrumentation and monitoring technology specifically designed for geotechnical engineering applications, large-scale tests and long-term performance of completed structures.

He was involved in a broad spectrum of relevant and challenging instrumentation projects in Italy and worldwide, such as: the stabilization of the Tower of Pisa, the remedial work and monitoring following the disastrous landslide at Valpola in Valtellina (Italy), the design of the monitoring system for Yacireta dam in Argentina, as well as many other significant projects. In 1996 he was appointed Head of the Geo-Environmental Monitoring Unit at ISMES.

In 2000 he was one of the founders of FIELD Srl, a service company specializing in geotechnical and structural instrumentation and monitoring services. Since then he has been a shareholder and Technical Director.

He has acquired extensive experience and expertise on instrumentation and monitoring of dams, slopes, tunnels, foundations, and earth structures, as well as on many soil-structures interaction cases. In 1995 he was responsible for organizing the Fourth International FMGM symposium (Field Measurements in Geomechanics) which was held in Bergamo (Italy). Since then, he has served as a permanent member of the FMGM International Advisory Committee.

He has published over thirty technical papers and has held specialized courses, lectures and workshops both in Italy and abroad on topics related to geotechnical and structural instrumentation and monitoring.

He is currently a member of ISO-CEN TC 341/WG1/TG2 “Geotechnical investigation and testing – Geotechnical monitoring by field instrumentation” dealing with the issuing of European standards on measurements and monitoring for geotechnical applications.

He has been appointed by World Bank as consultant for the upgrading of the monitoring system of Tarbela Dam, Pakistan.

In his activity he has always aimed at giving monitoring a recognized role, and has promoted the introduction of shared rules and guidelines to facilitate approach and mutual understanding.

He has always been proud and grateful for the friendship of two key figures in his life, who have been his mentors: Domenico Bruzzi, who gave him many opportunities to realize his expectations, and Elmo DiBiagio, who has inspired his way of approaching the world of measurement and monitoring.

PERSONAL DATA

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Name Giorgio Pezzetti
Birth Bergamo / April 30, 1954
Nationality Italian
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PROFESSION

Current position Private consultant

EDUCATION

University Politecnico di Milano / Milan / Italy
Degree Degree in Civil Engineering
Year 1979

COMPETENCES

Skills & Competences Geotechnical instrumentation
Foundation monitoring
Ground water monitoring
Slope and landslide stability monitoring
Pile testing
Tunnel monitoring
Embankement dam monitoring
Hydrometeorological monitoring network
Environmental monitoring systems

LANGUAGES

Mother tongue Italian
Other languages English: fluent written and spoken
French: conversation

PROFESSIONAL EXPERIENCES

Company FIELD S.r.l.
Position Technical Director
Period 2000 / December 31, 2014

Company ISMES S.p.A.
Position System Engineering Area: Heads of Monitoring Unit
Period 1998/99

Company ISMES S.p.A.
Position Instrumentatin Development Coordinator
Period 1995/98

Company ISMES S.p.A.
Position Head of the Geo-Environmental Monitoring Unit of the
Environmental Engineering Department.
Coordinator of Geo-Environmental monitoring activities.
Period 1990/95

Company ISMES S.p.A.
Position Geotechnical Department:
Engineer - design and procurement of geotechnical instrumentation
and monitoring systems.
Period 1982/90

Company ISMES S.p.A.
Position Static Test Department - Staff Engineer.
Tests and research on structures and materials.
Period 1980/82

MEMBERSHIP

Ordine degli Ingegneri della provincia di Bergamo (Bergamo Council of the Engineers)

AGI - Associazione Geotecnica Italiana (Italian Geotechnical Association)

ISO/CEN: Member of ISO/CEN TC 341–WG1–TG 2 “Geotechnical investigation and testing – Geotechnical monitoring by field instrumentation on “

ACTIVITIES / MAIN PROJECTS

DAMS

- Ridracoli Dam (Forlì, Italy): Special piezometer design
- Barbellino Dam (Bergamo, Italy): Foundation instrumentation
- Yacyreta Dam (Argentina): Dam monitoring system
- Zoccolo dam (Italy): monitoring instrumentation
- NARMADA Authority Control (India): Design for a hydrometeorologic monitoring network and flood forecast in the Narmada basin
- Locone Dam (Bari, Italy): Static and dynamic monitoring system
- GBC – Ghazi Barotha Contractors (I.R. of Pakistan): Automatization of the barrage monitoring system
- Kotri Barrage (I.R. of Pakistan) – Rehabilitation of the automatic monitoring system of the Barrage
- Tarbela Dam (I.R. of Pakistan) - Consultancy for Automation & Up-Gradation of Instrumentation

POWER PLANTS

- Torre Valdaliga Nord power plant (Italy): Water intake monitoring instrumentation
- Piemonte nuclear power plant (Italy): Site qualification
- Tavazzano power plant (Italy): Pile instrumentation
- ENEL S.p.A. (Italy): Off-shore Power Plant Project - Large scale test on a skirt pile model
- ELSE S.p.A.: Vertical Load Tests on small diameter foundation piles at Fusina Power Plant (Venice, Italy)
- ENEL S.p.A. (Italy): Montalto di Castro Power Plant. Pile Driving Monitoring and Tensile tests on model piles

LANDSLIDES

- Val Pola Landslide (Italy): Geotechnical monitoring instrumentation
- S.Leo Municipality (Forlì-Cesena, Italy): San Leo cliff monitoring
- North Italy Municipalities (Italy): Landslides Monitoring with Web management system

ACTIVITIES / MAIN PROJECTS

PILES & FOUNDATIONS

- Gioia Tauro (Italy): Breakwater foundation instrumentation
- FF.SS. (Italy): Bologna-Verona Line – Static loading tests on test pile
- Bouri DP3 Platform (Lybia): Pile driving monitoring and qualification tests.
- Bouri DP4 Platform (Lybia): Pile driving monitoring
- Vega Platform (Italy): pile driving monitoring
- Pennina Platform (Italy): pile driving monitoring
- Saipem (Italy): Field test on foundation pile joint instrumentation
- Università della Calabria (RC – Italy): Field test for soil sampling by freezing technique
- ENEL POWER (Italy): Load tests on Test piles for the Porto Tolle Power System (RO)
- TREESSE S.r.l. (Italy): Pile Driving Monitoring at Bocca di Lido for the MOSE Project (VE)
- Clodia S.c.a.r.l. (Italy): Pile Driving Monitoring

ROAD, RAIL & TUNNEL

- Valgenova-Nembia water tunnel (Italy): structural instrumentation
- Cagliari (Italy): Road embankment and docks monitoring
- Fiumicino airport (Italy): Landing runway instrumentation
- Milan Underground Authority (Italy): Geotechnical investigation and monitoring of an experimental tunnel
- CEPAV II (Italia): Milano-Bologna high speed railway – Design of the monitoring system
- SISGEO S.r.l. (Italy): Design of the Monitoring System for the new High Speed Railway Line Milano-Torino
- Impresa Matarrese S.p.A. Bari (Italy): Static and dynamic monitoring system of the High Speed Railway Bridge on the Brenta River of the A.V. Milano Venezia, Verona-Venezia section.
- IMPRESA PIZZAROTTI S.p.A. (Italy): Milano-Verona High Speed Railway – Design of the structures monitoring system
- Metro C - Rome (Italy): Supervision to the installation and reference measurements of geotechnical monitoring instrumentation for the San Giovanni - Coliseum section of the “C Line”

STRUCTURES & BRIDGES

- Consorzio Torre di Pisa (Italy): Design and Installation of special geotechnical instrumentation and monitoring systems
- Impresa Pessina S.p.A. (Milan, Italy): Load Test on the large span roof beams of the new Hangar of the Milan Malpensa Airport.
- Municipality of Milan (Italy): Certosa Cable-Stayed Bridge monitoring system
- Municipality of Parma (Italy): A. De Gasperi bridge commissioning tests and monitoring system
- Clodia S.c.a.r.l.: Monitoring of retain Structures at Bocca di Chioggia for the MOSE Project (Venice, Italy)
- F.I.P Industriale S.p.A. (Italy): New bridge over Po River in Piacenza: Beams Launching monitoring and long term monitoring of the bridge.

ENVIRONMENTAL

- Bologna subsidence (Italy): Deep settlement gauges and piezometer
- Imola (Italy): Environmental integrated monitoring system
- Rovigo (Italy): Environmental integrated monitoring system
- Taranto (Italy): environmental integrated monitoring system

HYDROMETEOROLOGICAL

- DAEE (Brazil): Hydrometeorologic monitoring network in Sao Paulo State
- Italian Army (Italy): Snow and Meteorological monitoring network on the Alps
- Prefettura di Pavia (Italy): Hydrological Monitoring Network for flood warning system

TEACHING ACTIVITY

- Venue Politecnico di Torino / Corso di aggiornamento per Geologi
Subject Seminar on: *Strumentazione Geotecnica per il Monitoraggio delle Frane*
Year Torino / Italy, 1991
- Venue FAPIO Project
Subject Seminar on: *Sistemi di Monitoraggio Ambientale*
Year Piombino/ Grosseto / Italy, 1992
- Venue FMGM 95 in Bergamo / Italy
Subject Member of the Organizing Committee of the 4th International Symposium on Field Measurements in Geomechanics - FMGM 95
Year Bergamo / Italy, 10-12 Apr 1995
- Venue University of Milan
Subject Seminar on: *La strumentazione nell'Ingegneria Geotecnica*
Year Milano / Italy, Nov 1997
- Venue Politecnico di Milano
Subject Seminar on: *La strumentazione nell'Ingegneria Geotecnica*
Year Milano / Italy, Dec 1997
- Venue University of Bergamo / Faculty of Engineering
Subject Seminars on: *L'Applicazione di Metodi Statistici al Monitoraggio*
Year Bergamo, Italy / 2005-11
- Venue University of Trento / Faculty of Engineering
Subject Seminars on: *Monitoraggio Geotecnico*
Year Trento / Italy, 2006-10
- Venue Bolzano Board of Engineers
Subject Seminar on: *Monitoraggio in Ingegneria Geotecnica: scopi, strumenti e misure*
Year Bolzano / Italy, April 2008
- Venue I.R. IRAN / Ministry of Energy / Water Resources Department
Subject *Workshop on Dam Monitoring*
Year Iran, September 2010
- Venue University of Parma
Subject Workshop on Structural Monitoring – Applications and Potentiality:
Bridge Monitoring - The De Gasperi Bridge Case
Year Parma / Italy, May 2010
- Venue University of Udine / AVAMIRI
Subject II level Master on: *Analisi, valutazione e mitigazione del rischio idrogeologico*
Seminar on *Design of Monitoring System and Instrumentation selection*
Year Gorizia / Italy, 2009-2010-2011
- Venue University La Sapienza, Rome / CERI and NHAZCA Research Centres
Subject *Corso teorico pratico monitoraggio versanti instabili*
Year Valmontone / Rome / Italy, Feb 2010-Jan 2011
- Venue University La Sapienza, Rome / CERI Research Centre
Subject Seminar on: *Sistemi di Monitoraggio ed Allertamento*
Inquadramento, Progettazione, Scelta degli Strumenti, Analisi dei dati
Year Rome, May 2012

PUBLICATIONS

- BRUZZI D., PEZZETTI G., PICCOLI S. (1986). *La strumentazione geotecnica nel monitoraggio dei movimenti franosi profondi*. XVI Convegno Nazionale di Geotecnica di Bologna / Italy
- DEVIN P., PEZZETTI G., RICCIARDI C., TOMMASI P. (1988). *Prospectives related to the use of experimental apparatus developed to measure the precision of probe inclinometer and extensoinclinometer*. 5th International Symposium on landslides / Lausanne (Svizzera)
- BELFIORE F., COLOMBO P.F., PEZZETTI G., VILLANI B. (1989). *A contribution to the study of the subsidence of Bologna*. XII ICSMFE International Conference of Rio de Janeiro / Brazil
- PEZZETTI G. (1989). *Controlli sulle fondazioni profonde*. XVII Convegno Nazionale di Geotecnica, Taormina
- BRUZZI D., PEZZETTI G. (1989). *Technology and management of a real time monitoring system, the lesson from Valtellina*. Conference on Soil Mechanics, Rio de Janeiro / Brazil
- MANES V., O'NEILL D., PEZZETTI G. (1990). *Esperienze di infissione di un modello a grande scala di cassone pila*. IV Colloquio A.I.O.M., Cagliari / Italy
- O'NEILL D., PEZZETTI G. (1991). *In situ penetration of a large scale model skirt pile*. 3rd FMGM, Intl. Symposium on Field Measurements in Geomechanics, Oslo / Norway
- PEZZETTI G. (1992). *Tecniche di indagine dei siti contaminati*. XXXIX Corso di aggiornamento in Ingegneria Sanitaria, Politecnico di Milano, 1992
- PEZZETTI G., ZATTONI A., (1993). *Landslide Monitoring / Seminaire: Instrumentation et telesurveillance des ouvrages et des sites*, Nancy 4-7 ottobre 1993 / France
- BRUZZI D., PEZZETTI G. (1993). *Strumentazione e monitoraggio, analisi e prospettive del mercato. La geotecnica in Italia e in Europa*. Universita' degli studi di Ferrara, 15/10/1993
- BALDI G., PEZZETTI G., (1994). *Monitoraggio geotecnico del terreno di fondazione*. Seminario di Aggiornamento su Meccanica dei rifiuti e analisi strutturale dei componenti di una discarica controllata. S. Margherita di Pula (CA) 10-14 Ottobre 1994.
- PEZZETTI G. (1995). Editor of the proceedings of the 4th International Symposium on Field Measurements in Geomechanics, Bergamo, Italy, April 10 - 12 1995
- BRUZZI D., DIBIAGIO E., PEZZETTI G. (1999). *Classification, certification and specification of instruments for field measurements*, 5rd FMGM, Intl. Symposium on Field Measurements in Geomechanics, Singapore.
- BRUZZI D., PEZZETTI G., ZATTONI A. (1999). *Pressure cells: how to obtain better results*, 5rd FMGM, Intl. Symposium on Field Measurements in Geomechanics, Singapore.
- BRUZZI D., SORUM G., PEZZETTI G. (2003). *Quality assurance in the supply and procurement of instrumentation components and systems*. 6th FMGM, Intl. Symposium on Field Measurements in Geomechanics, Oslo - Norway.
- DIBIANCO R., PRESSI E., MAGGI G. PEZZETTI G. (2003). *A relevant geotechnical and structural monitoring project – The experience of the new Milan-Bologna High Speed Railway Line*, 6th FMGM, Intl. Symposium on Field Measurements in Geomechanics, Oslo, Norway
- PEZZETTI G. (2004). *Controllo delle Opere nel Tempo*. Corso di aggiornamento Professionale "GEOTECNICA DELLE FONDAZIONI" – Ordine dei Geologi della Lombardia - Pavia 24 Giugno 2004

- LAMPERTI R., PEZZETTI G. (2004). *Monitoraggio delle strutture della Tratta AV Milano-Bologna, Criteri di scelta della strumentazione in fase progettuale*. 9° ciclo di Conferenze Alta Velocità – Pianoro (BO) 25 Giugno 2004
- FASSO' A., NICOLIS O., BRUZZI D., PEZZETTI G. (2005). *Modelling and reducing uncertainty of field monitoring data in geomechanics by computerized statistical methods*. 11th IACMAG Conference, Turin, June 19-24, 2005
- RAUSCHE F., PEZZETTI G., IANNACCI C., KLESNEY A. (2006). *Dynamic analysis of follower driven piles for the Venice Flood Gate Project, Conference on Piling and Deep Foundations* (organizer DFI) in Amsterdam, May 31 - June 2, 2006
- BONNARDEL F., CAMPIONE C., VACCA O., CASTIGLIA C., PEZZETTI G., (2007). *Design and construction of the "Upper" lot of the Basse di Stura landfill in Torino: a new independent landfill above closed lots*. IWWG Sardinia 2007. Cagliari, 1-5 October 2007
- BRUZZI D., FASSO' A., NICOLIS, O., PEZZETTI G., (2007). *Statistical Analysis: a Tool for Understanding Monitoring Data*. 7th FMGM, Intl. Symposium on Field Measurements in Geomechanics, Boston, USA.
- FASSO' A., PEZZETTI G., (2007). *Statistical Methods for Monitoring Data Analysis*. 7th FMGM, Intl. Symposium on Field Measurements in Geomechanics, Boston, USA.
- MALERBA P.G., GIUSSANI A., PEZZETTI C., MALERBA C., (2008). *Design expectation and monitoring of the Certosa fly-over in Milan (Italy)*. IABSE Symposium, Seoul, Korea.
- CACI V., PEZZETTI G, (2010). *Potentiality of Monitoring Systems in Mining Activity", IV International Geomechanics - Theory and Practice of Geomechanics for effectiveness the mining production and the construction*. Varna (Bulgaria)
- PEZZETTI G. (2010) *Do we really understand Measurements?* Workshop on Dam Safety, Ministry of Energy, Tehran, Islamic Republic of Iran.
- PEZZETTI G., (2011). *What do they expect from?* 8th FMGM, Intl. Symposium on Field Measurements in Geomechanics, Berlin, Germany
- PEZZETTI G., (2011). *Catalogues, Product Data Sheets and Manuals: tools to select instruments?* 8th FMGM, Intl. Symposium on Field Measurements in Geomechanics, Berlin, Germany
- BETH M., PEZZETTI G., SCHMUCK C.(2011). *Urban Excavation Instrumentation: Analysis and reflexions*. 8th FMGM, Intl. Symposium on Field Measurements in Geomechanics, Berlin, Germany
- SIMEONI L., DE POLO F., CALONI G., PEZZETTI G. (2011). *Field performance of fully grouted piezometers*. 8th FMGM, Intl. Symposium on Field Measurements in Geomechanics, Berlin, Germany
- MAZZANTI P., PEZZETTI G. (2013). *Traditional and Innovative Techniques for Landslide Monitoring: dissertation on design criteria*. DGGT "Tagung für Ingenieurgeologie 2013" – Munich - Germany
- PEZZETTI G. (2014). *Why Monitoring*. First International Course on Geotechnical and Structural Monitoring. Poppi, Italy
- PEZZETTI G. (2014). *Looking at Data*. First International Course on Geotechnical and Structural Monitoring – Poppi, Italy