

GIOVANNI PIETRO BERETTA

Date of birth: 14/02/1954

AUTHOR ID

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EDUCATION

1978 Degree in Earth Science (4 years): summa cum laude (tutor Prof Vincenzo Francani, Politecnico di Milano), Department of Earth Sciences, Università degli Studi di Milano, Italy

CURRENT POSITION

2003 up to now Full professor of Hydrogeology and Applied Hydrogeology (permanent position), Department of Earth Sciences, Università degli Studi di Milano, Italy

PREVIOUS POSITION

1987-1991 Adjunct Professor in Engineering Geology, Department of Transport System, Politecnico di Milano

1992-1995 Appointed Professor in Engineering Geology, Department of Transport System, Politecnico di Milano

1992 - 2000 Associate Professor in Engineering Geology, Department of Earth Science, Università degli Studi di Torino

2000-2002 Associate Professor in Engineering Geology, Department of Earth Science, Università degli Studi di Milano

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2005 – 2015 Number of Postdocs: 2

Number of PhD students: 2

Number of Master students: 62 (Università degli studi di Milano) and more in Università degli studi di Milano Bicocca, Università degli studi di Siena, Università degli studi di Torino, Università degli studi di Venezia, Politecnico di Milano

TEACHING ACTIVITIES

2000-2009 Professor in Hydrogeology, Department of Earth Science, Università degli Studi di Milano, 6 ECTS per year

2000-2009 Professor in Applied hydrogeology, Department of Earth Science, Università degli Studi di Milano, 6 ECTS per year

2010 up to now Professor in Exploration and management of water resources, Department of Earth Science, Università degli Studi di Milano, 9 ECTS per year

2010 up to now Professor in Water quality and site remediation. 6 ECTS per year

2004 Professor in Master Profession geologist, Department of Earth Science, Università degli Studi di Milano

2004 up to now Professor in Modeling of geoenvironmental data, Department of Earth Science-Center of

Geotechnologies, Università degli studi di Siena
2009 Professor in Master in Biomonitoring, Department of Biology, Sapienza Università di Roma
2007-2015 Professor in Master in Characterization and technologies for contaminated sites remediation,
Department of Chemistry, Sapienza Università di Roma

ORGANISATION OF SCIENTIFIC MEETINGS

2014 Member of scientific committee of the congress Flowpath 2014
2015 Member of scientific committee of the congress SGI-SIMP 2014

INSTITUTIONAL RESPONSIBILITIES

2000 – 2015 Member of teaching board, PhD in Earth Sciences, Università degli Studi di Milano, Italy
2007 – 2013 Deputy director of Department of Earth Sciences, Università degli Studi di Milano,
2009 – 2014 President of the degree course in Earth Science, Department of Earth Sciences, Università
degli Studi di Milano
2009 – 2014 Member of the board of Faculty of Mathematical, Physical and Natural Sciences, Università
degli studi di Milano
2007 up to now Member of the board of Department of Earth Sciences, Università degli Studi di Milano
2014 up to now President of the Planning Commission and Joint Commission of Department of Earth Sciences,
Università degli Studi di Milano

COMMISSIONS OF TRUST

2008 up to now: referee of MIUR for PRIN projects

EDITORIAL ACITIVITIES

Editor in chief of Acque Sotterranee – Italian Journal of Groundwater
Member of Scientific Committee of GEAM Geoenvironment and Mining

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

1985 up to now Member of IAH (International Association of Hydrogeologist)
1991 up to now Member of the GEAM (Geoenvironment and Mining)
1998-2014 President of SIAS (Italian Section of Groundwater)
2000 up to now Member of the AIGA (Italian Association of Applied and Environmental Geology)
1995 - 2014 Member of AGI (Italian Association of Geotechnique)
1995 – 2014 Member of AII (Italian Hydrotechnical Association)
1992 up to now Member of Association of Ground Scientist & Engineers (Division of National Ground
Water association)

EARLIER RESEARCH GROUPS

C.N.R.-I.R.S.A. : "Gruppo di studio sulle falde acquifere profonde della Pianura Padana"
M.P.I. 40% : "Geologia delle grandi Pianure italiane"
M.P.I. 40% : "Geomorfologia della Pianura Padana"
C.N.R.-I.P.R.A. : "Aree marginali"
M.P.I. 40% : "Valutazione delle risorse idriche sotterranee del territorio italiano"

C.N.R.-G.N.D.C.I. : L.R.4 - "Vulnerabilità degli acquiferi all'inquinamento"

M.U.R.S.T. 40% : "Difesa del suolo e gestione delle risorse idriche sotterranee" I e II fase

C.N.R.: "Progetto strategico C.N.R.: Territorio e ambiente – Sottoprogetto: criticità delle disponibilità di acqua da utilizzare a scopi idropotabili"

M.I.U.R.-P.R.I.N. - "Valutazione delle tecniche di caratterizzazione idrogeologica di siti contaminati da DNAPL"

CAREER MILESTONES:

Professor of hydrogeology and applied hydrogeology in the Department of Earth Science "Ardito Desio" at the University of Milano. He taught university level courses in hydrogeology at the University of Torino and at Politecnico of Milano and master level courses at University of Milano - Bicocca, University of Milano, University Sapienza of Roma, University of Siena, University of Sannio and University of Catania. Prof. Beretta is author of more than 240 papers in both international and Italian journals and in conferences proceedings. He's research topics are general hydrogeologic studies in Northern Italy, aquifers parameterization, aquifer vulnerability, groundwater and soil remediation and monitoring, geothermal heat pump, groundwater modelling, waste disposal and land subsidence. He's author of two text books on groundwater remediation ("Idrogeologia per il disinquinamento delle acque sotterranee") and on environmental data analysis ("Il trattamento e l'interpretazione dei dati ambientali"). He's co-author of 6 technical guidelines on the several aspects of contaminated site remediation. He was invited speaker at many seminars and courses at environmental consulting firms and public agencies, he took part in several research groups and he was leader of several national and regional research projects on groundwater monitoring and contaminant transport in the vadose zone. He was one of the technical advisors for the writing of the Italian rule about natural water protection and he has been working as an expert on contaminated site remediation at the Italian Environmental Ministry. Prof. Beretta is fellow of the Associazione Georisorse e Ambiente (GEAM), Associazione Italiana di Geologia Applicata e Ambientale (AIGA) and National Water Well Association (NWWA). Editor in chief of the revue Acque Sotterranee-Italian Journal of Groundwater and member of the Scientific Committee of GEAM.

1978 - Degree in Earth Science: summa cum laude

1980 – 1991 – Politecnico di Milano. Research topics in aquifer vulnerability, wellhead protection, ground subsidence and vertical movements of soil (neotectonics). Prof. in Applied Hydrogeology

1992-2000 – Università degli studi di Torino. Research topics in flow in unsaturated media, water and landslides, groundwater monitoring network optimization. Associate professor in Engineering Geology and applied Hydrogeology

2001-up to now – Università degli studi di Milano. Research topics in cleanup of contaminated sites, flow and transport model application, use of groundwater for geothermal energy (low enthalpy), groundwater flow in rocks and spring, hydrogeology cartography (CARG geological maps), urban hydrogeology and groundwater rising, landfills and groundwater pollution. Associate professor up to 2003 and full professor up to now.

PUBLICATIONS

BERETTA G.P., BOZZANO F., DEL BON A., MAJONE M., NARDONI F., PACIONI E., PETITTA M., VIOTTI P. (2006) – "Multi-scale approach for geological and hydrogeological characterization of a polluted site in the municipalità of Rho (MI)". Proceedings International Conference on the Remediation of Polluted Sites Bosicon, Rome

MASETTI M., POLI S., STERLACCHINI S., BERETTA G.P., BRAMBILLA M. (2007) – "Regional-scale assessment of factor affecting non-point source pollution: nitrate in groundwater". Groundwater and Ecosystems, Proceedings of XXXV IAH Congress, 17-21 september, Lisbon

MASETTI M, POLI S., STERLACCHINI S., BERETTA G.P., FACCHI A. (2008) - "Spatial and statistical assessment of factors influencing nitrate contamination in groundwater". Journal of Environmental

Management, 86:1(2008). - 272-281

ROSSETTI S., AULENTA F., BERETTA G.P., MAJONE M., TANDOI V. (2008) – “In situ molecular tracking of dehalogenating bacteria: from microbial enrichments to field samples”. ConSoil 2008, Milan, June 3-6, D59-67

BERETTA G.P., MARANGONI T. MASETTI M., PEDRETTI D. (2008) – “Optimization of a 2D finite element unsaturated flow model in a deep NAPL-contaminated area in Rho (Milan, Italy)”, ConSoil 2008, Milan, June 3-6, D293-301

SORICHETTA A, MASETTI M, BALLABIO C., STERLACCHINI S., BERETTA G.P. (2011) - “Reliability of groundwater vulnerability maps obtained through statistical methods”. Journal of Environmental Management, 92, 1215-1224. doi:10.1016/j.jenvman.2010.12.009

MASETTI M., POLI S., STERLACCHINI S., BERETTA G.P., FACCHI A. (2011). “Spatial and statistical assessment of factors influencing nitrate contamination in groundwater”. Journal Of Environmental Management, ISSN: 0301-4797, doi: 10.1016/j.jenvman.2006.12.023

BORIANI A., BINI A., BERETTA G.P., BERGOMI M.A., BERRA F., CARIBONI M., FERRARIO A., FERLIGA A., MAZZOCOLA D., MIGLIACCI BELLATE R., RONCHI A., ROSSI R., ROSSI S., PAPANI L., SCIESA E., TOGNINI P. (2012) – “Note Illustrative della Carta Geologica d'Italia alla scala 1:50.000. Foglio 056 – Sondrio”. A cura di Regione Lombardia, ISPRA. - System Cart Roma : Regione Lombardia, ISPRA, 2012. (Carta Geologica d'Italia alla scala 1: 50.000 - Note Illustrative ; 056)

PEDRETTI D., MASETTI M., BERETTA G.P., VITIELLO M. (2013) – “A Revised Conceptual Model to Reproduce the Distribution of Chlorinated Solvents in the Rho Aquifer (Italy)” – Groundwater Monitoring & Remediation doi: 10.1111/gwmr.12017

BERETTA G.P. (2015) – “Some aspects of the state of the art of contaminated sites remediation in Italy”. Acque sotterranee-Italian Journal of Groundwater, n.3, 27-40