

1. Surname BARBIERI

2. First name: MAURIZIO

3. Nationality: Italian

4. Contacts: tel. +39 0649914593 email: maurizio.barbieri@uniroma1.it

5. Education:

Institution: Sapienza University of Rome, Italy,

Date: 1988 – 1993

Diploma obtained: Laurea (eqv. to MSc Degree) in Geological Sciences with honours (110/110 cum laude).

Institution: Sapienza University of Rome, Italy

Date: 1994 – 1997

Diploma obtained: PhD in Earth Sciences; Specialization in Environmental Geochemistry.

Application of the geochemistry methodologies in the characterization of environmental problems. In particular I studied the distribution of elements and isotopes in the Earth systems with emphasis on the use abundances and isotopic ratios in defining the interaction between different reservoirs (mantle, crust, atmosphere ad hydrosphere). I have also related interests in environmental geochemistry and Health. In particular I study the role of toxic trace elements (e.g. As, B and Hg), deriving from hydrogeochemical anomalies of natural origin, on water quality.

6. Languages skills: Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic).

Language; Reading_Speaking_Writing Italian_1_1_1__ English_1_1_1__

7. Essential qualifications and experience: I have a Bachelor's Degree and a Master's Degree in Geological Sciences at the Sapienza University of Rome (Italy) with a specialization in Environmental Geochemistry and Natural Resources Management and a PhD in Earth Sciences, at the same University, on the use environmental tracers (natural compounds or isotopes) to identify mechanisms and quantify timescales of environmental processes.

For more than 15 years I have been working as a researcher and from 2005 as Associate Professor and scientific coordinator on projects, dealing with environmental geochemistry. More specifically, I worked on the following research:

Scientific coordinator (2000) of the research between the CNR (National Research Council) and National Institute of Geophysics and Volcanology Section of Rome, for the measurement and interpretation of isotope ratios in water samples from the fields of Weyburn oil wells (Southern Saskatchewan, Canada), within the project EC WEYBURN.

Scientific coordinator (2003) of the research between the CNR (National Research Council) and National Institute of Geophysics and Volcanology Section of Rome, for the measurement and interpretation of isotope ratios in water samples from the seismic Aigion (Greece, Strait of Corinth), under the Agreement EC 3F-Corinth No ENK6-CT-2000-00056 in which the INGV-Rome (Dr. F. Quattrocchi) scientific partner responsible for the task WP7 - Geochemical transients, fluid geochemistry.

Since July 2009 I am part, as an expert, of the working group established within the III Section of the National Health Council for the examination of hydrogeochemistry and hydrogeological aspects related to the recognition of natural mineral waters. Since September 2009, I have been

part of the Academic Board of the PhD in Earth Sciences of Sapienza University of Rome;

2009-2016 Board of Directors member at Sapienza University of Rome;

Scientific Coordinator for the Geochemical model of the Vico Lake, with particular regard to environmental arsenic. Client: Regional Agency for Environmental Protection of Lazio. October 2014 – October 2016.

Scientific coordinator for the Water Unit of the National Project (2010-2011): Ecological restoration plan for Palo Laziale Wood, Italy. funded by the Nando Peretti Foundation;

Scientific coordinator for the Water Unit of the International Project (2012-2014): Institutional Support to the management of Protected Areas in Albania funding from the International Union for Conservation of Nature (IUCN);

Scientific coordinator of the Water Unit for the International Project (2008 - 2010): Sustainable Development and Biodiversity Conservation for the People of Socotra Island (Yemen) eligible for funding by the United Nations Development Programme (UNDP).

Environmental Advisor (Hydrogeochemistry) for the International Project (2016-2019) SECOSUD II - Conservation and equitable use of biological diversity in the SADC region. The project is financed by the Italian Agency for Development Cooperation and implemented through Eduardo Mondlane University, SouthAfrican National Park and Sapienza University of Rome.

Analytical Geochemistry Laboratories Manager from 2001. The Sapienza Analytical Geochemistry Laboratories provide high quality analytical expertise and specialist services for the production and geochemical interpretation of inorganic data for many projects, and for commercial and public sector clients around the world. Project areas benefiting from input by laboratory staff are wide ranging and include: geochemical surveys, water

resources, contaminated land, natural hazards, mineral exploration, waste disposal, environment and health, climate change. Clients and collaborators include major mining companies, government departments, universities, local authorities, public utilities, power generators.

The analytical capability provides extensive datasets on a wide range of geological and environmental samples, including rocks, soils, sediments, vegetation, waters, biological. Full suite analysis of water samples is provided for a range of major and trace cations and anions as well as other chemo-physical parameters. The ICP Facility provides high quality major and trace element information on geological, environmental and biological systems, using ICP-MS methodologies.

The ICP Facility has the capability to analyse a wide range of sample types including: surface and groundwaters, landfill leachates, rocks, soils, stream and marine sediments, coal, fly ash, vegetation, cement, shells and corals, filter media, hair, fingernails, and many more challenging sample matrices.

10. Other skills, computer: Word Processing: MS Word, Adobe Acrobat, Open Office Spreadsheets and databases: Excel, Access Statistical Software: SPSS, STATISTICA, Graphic/image software: PowerPoint, PhotoShop

11. Present position: Associate Professor of Environmental Geochemistry and Hydrogeochemistry at the Earth Sciences Department, Sapienza University of Rome, Italy.

12. Key qualifications: Geochemistry, Environment-related research: waste hydrogeochemistry, disposal, health, Natural resources management: Environmental geochemistry for biodiversity conservation and sustainable development.

13. List of scientific publications:

1. Nigro Angela, Barbieri Maurizio, Sappa Giuseppe. (2015).

Hydrogeochemical characterization of municipal solid waste landfill. Rendiconti online della Società Geologica Italiana 04/2015; 35:304-306. Doi: 10.3301/ROL.2015.126

2. Garone Angelica, Barbieri Maurizio, Summa Gianpietro. (2014). Hydrogeochemical characterization of the southern sector of the Alburni Massif, Campania region, Italy. Senses and Sciences 1(4), 123-130. Doi: 10.14616/sands-2014-4-123130

3. Barbieri Maurizio, Nigro Angela, Sappa Giuseppe. (2014). Arsenic contamination in groundwater system of Viterbo area (Central Italy). Senses and Sciences, 1 (3):101-106 doi: 10.14616/sands-2014-3-101106

4. Barbieri Maurizio, Nigro Angela, Sappa Giuseppe. (2014). Arsenic contamination in groundwater system of Viterbo area (Central Italy). Senses and Sciences, 1 (3):101-106 doi: 10.14616/sands-2014-3-101106

5. Nigro Angela, Barbieri Maurizio, Sappa Giuseppe. (2014). Geochemical characterization of groundwater around Municipal Solid Waste landfill. DOI: 10.3301/ROL.2014.140. Conference: SGI-SIMP. The future of the Italian Geosciences, At Milano, Volume: Rend. Online Soc. Geol. It., Suppl. n. 1 al Vol. 31

6. Barbieri Maurizio, G Sappa Giuseppe, Vitale Stefania, Parisse Barbara, Battistel Maria. (2014). Soil control of trace metals concentrations in landfills: A case study of the largest landfill in Europe, Malagrotta, Rome. Journal of Geochemical Exploration 08/2014; 143. DOI:10.1016/j.gexplo.2014.04.001

7. Barbieri Maurizio, Nigro Angela, Voltaggio Mario. (2014). Sr isotopes and U series radionuclides in the Sangemini area (Central Italy): Hydrogeology implications. Senses and Sciences ; 1 (2):51-55. doi: 10.14616/sands-2014-2-5155.

8. Barbieri Maurizio, Nigro Angela, Sappa Giuseppe. (2014). The Human impact on the natural environment: elemental geochemistry of a MSW landfill as a tool to trace changes in ecosystem processes. 14th SGEM GeoConference on Water Resources. Forest, Marine And Ocean Ecosystems, www.sgem.org, SGEM2014 Conference Proceedings, ISBN 978-619- 7105-13-1 / ISSN 1314-2704, June 19-25, 2014, Vol. 1, 753-758 pp. Doi: 10.5593/SGEM2014/B31/S12.096

9. Garone Angelica, Rossi Matteo, Nigro Angela, Barbieri Maurizio. (2014) Water quality assessment of the Buna River Protected Landscape, Northern

Albania. Conference: SGI-SIMP 2014, Volume: Rend. Online Soc. Geol. It. Vol. 31 p. 557. Doi:10.3301/ROL.2014.140

10. Caschetto Mariachiara, Barbieri Maurizio, Galassi Diana M. P., Mastrorillo Lucia, Rusi Sergio, Stoch Fabio, Di Cioccio Alessia, Petitta Marco. (2014). Human alteration of groundwater–surface water interactions (Sagittario River, Central Italy): implication for flow regime, contaminant fate and invertebrate response. *Environmental Earth Sciences* Volume 71, Issue 4, pp 1791-1807. Doi 10.1007/s12665-013-2584-8

11. Battistel Maria, Barbieri Maurizio. (2013) Numerical modeling and strontium isotopic signal to assess the arsenic distribution in a low-enthalpy hydrothermal system: the case study of Viterbo geothermal area (Italy). American Geophysical Union, Fall Meeting 2013

12. Maurizio Barbieri, Maria Battistel, Tiziano Boschetti (2013). Chemical and isotope monitoring at Lake Albano (Central Italy): water-rock interaction and climate change effects. *Procedia Earth and Planetary Science* 7, 53-56. Doi:10.1016/j.proeps.2013.03.117

13. F. Vergari, M. Della Seta, M. Del Monte, M. Barbieri (2013). Badlands denudation "hot spots": the role of parent material properties on geomorphic processes in 20-years monitored sites of southern Tuscany (Italy). *CATENA*, vol. 106, p. 31-41, ISSN: 0341- 8162, doi: 10.1016/j.catena.2012.02.007 .02.007

14. Maurizio Barbieri, Maria Battistel, Angelica Garone (2013). The geochemical evolution and management of a coastal wetland system: A case study of the Palo Laziale protected area. *JOURNAL OF GEOCHEMICAL EXPLORATION*, vol. 126-127, p. 67-77, ISSN: 0375- 6742, doi: 10.1016/j.gexplo.2012.12.014

15. Medhat Abbas, Maurizio Barbieri, Maria Battistel, Giuditta Brattini, Angelica Garone, Barbara Parisse (2013). Water Quality in the Gaza Strip: The Present Scenario. *JOURNAL OF WATER RESOURCE AND PROTECTION*, vol. 5, p. 54-63, ISSN: 1945-3094, doi: 10.4236/jwarp.2013.51007

16. Caschetto Mariachiara, Barbieri Maurizio, Galassi Diana, Mastrolillo Lucia, Petitta Marco, Rusi Sergio. The groundwater dependent ecosystem of sagittario river, central italy: relationships between surface/groundwater and nitrogen cycle. *FLOWPATH 2012” Percorsi di Idrogeologia I edizione*

Bologna, 20-22 Giugno 2012.

17. Sappa Giuseppe, Barbieri Maurizio, Ergul Sibel, Ferranti Flavia (2012). Hydrogeological Conceptual Model of Groundwater from Carbonate Aquifers Using Environmental Isotopes (^{18}O , ^2H) and Chemical Tracers: A Case Study in Southern Latium Region, Central Italy.. JOURNAL OF WATER RESOURCE AND PROTECTION, vol. 4, p. 695-716, ISSN: 1945-3094, doi: 10.4236/jwarp.2012.49080 [con allegato e copyright].
18. Battistel Maria, Garone Angelica, Barbieri Maurizio, Parisse Barbara. (2012) Traditional (δD , $\delta\text{O}-18$) and non-traditional (Sr-87/Sr-86) isotopes approach to vertical lake profile study. EGU General Assembly 2012, held 22-27 April, 2012 in Vienna, Austria, p.2411.
19. Garone Angelica, Battistel Maria, Barbieri Maurizio, Parisse Barbara. (2012). Groundwater dynamic in a coastal aquifer using statistical analysis and geochemical modeling. EGU General Assembly 2012, held 22-27 April, 2012 in Vienna, Austria, p.2412.
20. Chiocchini Ugo, Castaldi Fabio, Barbieri Maurizio, Eulilli Valeria. (2011). Reply to comment on "A stratigraphic and geophysical approach to studying the deep-circulating groundwater and thermal springs, and their recharge areas, in Cimini Mountains–Viterbo area, central Italy". Hydrogeology Journal, vol. 19 (4), p. 949-952. DOI: 10.1007/s10040-011-0720-7.
21. Rozzi R., Palombo M.R, Barbieri M. (2011). The argali (*Ovis ammon antiqua*) from the Ponte Galeria area (Rome). IL QUATERNARIO, vol. 24 (1), p. 115-121, ISSN: 0394-3356
22. G. Bianchi-Fasani, C. Esposito, M. Petitta, G. Scarascia-Mugnozza, M. Barbieri, E. Cardarelli, M. Cercato, G. Di Filippo (2011). The Importance of Geological Models in Understanding and Predicting the Life Span of Rockslide Dams: The Case of Scanno Lake, Central Italy. In: Natural and Artificial Rockslide Dams. vol. 133, p. 323-346, Springer, ISBN: 9783642047633
23. M. Barbieri, G. Sappa, S. Vitale (2011). New methodologies for the definition of some heavy metals origin in sediments: a case history coming from an application in pontina plain . In: Geoitalia 2011. EPITOME, vol. 4, p. 88-89, ISSN: 1972-1552, Torino, 19-23 settembre 2011
24. Palombo M.R, Mussi M, Agostini S, Barbieri M, Di Canzio E, Di Rita F,

- Fiore I, Iacumin P, D. Magri, Speranza F, Tagliacozzo A (2010). Human peopling of Italian intramontane basins: The early Middle Pleistocene site of Pagliare di Sassa (L'Aquila, central Italy).. QUATERNARY INTERNATIONAL, vol. 223-224, p. 170-178, ISSN: 1040-6182, doi: 10.1016/j.quaint.2009.10.038
25. Sobhi Skaik S, Abu-Shaban N, Abu-Shaban N, M. Barbieri, Barbieri Mr, Giani U, Manduca P (2010). Metals detected by ICP/MS in wound tissue of war injuries without fragments in Gaza.. BMC INTERNATIONAL HEALTH AND HUMAN RIGHTS, vol. 10:17, p. 1-24, ISSN: 1472-698X, doi: 10.1186/1472-698X-10-17
26. Chiocchini U, Castaldi F, M. Barbieri, Eulilli V. (2010). A stratigraphic and geophysical approach to studying the deepcirculating groundwater and thermal springs, and their recharge areas, in Cimini Mountains–Viterbo area, central Italy.A stratigraphic and geophysical approach to studying the deepcirculating groundwater and thermal springs, and their recharge areas, in Cimini Mountains–Viterbo area, central Italy.. HYDROGEOLOGY JOURNAL, vol. 18, p. 1319-1341, ISSN: 1431-2174, doi: 10.1007/s10040-010-0601-5
27. Manzi G, Magri D, S. Milli, Palombo M.R, Celiberti V, Margari V, Barbieri M, Barbieri M, Melis R.T, Rubini M, Ruffo M, Saracino B, Tzedakis P.C, Zarattini A, Biddittu I (2010). The new chronology of the Ceprano calvarium (Italy). JOURNAL OF HUMAN EVOLUTION, vol. 59, p. 580-585, ISSN: 0047-2484, doi: 10.1016/j.jhevol.2010.06.010
28. G Molli, G Cortecci, L Vaselli, G Ottria, A Cortopassi, E Dinelli, M Mussi, M Barbieri (2010). Fault zone structure and fluid–rock interaction of a high angle normal fault in Carrara marble (NW Tuscany, Italy). JOURNAL OF STRUCTURAL GEOLOGY, vol. 32, p. 1334-1348, ISSN: 0191-8141, doi: 10.1016/j.jsg.2009.04.021
29. Petitta Marco, Scarascia Mugnozza Gabriele, Barbieri Maurizio, Bianchi Fasani Gianluca, Esposito Carlo (2010). Hydrodynamic and isotopic investigations for evaluating the mechanisms and amount of groundwater seepage through a rockslide dam. HYDROLOGICAL PROCESSES, vol. 24, p. 3510-3520, ISSN: 0885-6087, doi: 10.1002/hyp.7773
30. M. Petitta, Aravena R, Fracchiolla D, Barbieri M (2009). Application of isotopic and geochemical tools for the evaluation of nitrogen cycling in an

agricultural basin, the Fucino Plain, Central Italy.. JOURNAL OF HYDROLOGY, vol. 372, p. 124-135, ISSN: 0022- 1694, doi: 10.1016/j.jhydrol.2009.04.009

31. Biddittu I., M.R. Palombo, Magri D., Milli S., Barbieri Mr., Barbieri Mz., Celiberti V., Margari V., Melis R.T., Ruffo M., Saracino B., Manzi G. (2009). The Ceprano basin and its prehistoric evidence. In: GEOITALIA 2009. Rimini, Settembre 2009

32. M. Barbieri, Kuznetsova T.V, Nikolaev V.I, Palombo M.R. (2008). Strontium Isotopic composition in Late Pleistocene Mammal Bones from the Yakutian region (North-Eastern Siberia). QUATERNARY INTERNATIONAL, vol. 179, p. 72-78, ISSN: 1040-6182, doi: 10.1016/j.quaint.2007.08.014

33. Carnevale G., Longinelli A., Caputo D., Barbieri M., Landini W. (2008). Did the Mediterranean marine reflooding precede the Mio-Pliocene boundary? Paleontological and geochemical evidence from upper Messinian sequences of Tuscany, Italy. PALAEOGEOGRAPHY PALAEOCLIMATOLOGY PALAEOECOLOGY, vol. 257, p. 81-105, ISSN: 0031-0182, doi: 10.1016/j.palaeo.2007.09.005

34. Toscani L, Boschetti T, Maffini M, M. Barbieri, Mucchino C (2007). The groundwaters of Fontevivo (Parma Province, Italy): redox processes and mixing with brine waters.. GEOCHEMISTRY: EXPLORATION, ENVIRONMENT, ANALYSIS, vol. 7, p. 23-40, ISSN: 1467-7873, doi: 10.1144/1467-7873/06-112

35. Molli G, Vaselli L, Cortecci G, Ottria G, Cortopassi A, Dinelli E, M. Barbieri, Mussi M. (2007). High angle faulting in the Carrara marble (NW Tuscany, Italy): fault zone architecture and fluid-rock interaction. RENDICONTI DELLA SOCIETÀ GEOLOGICA ITALIANA, vol. 5, p. 180-181, ISSN: 0392-3037

36. Boschetti T, Cortecci G, M. Barbieri, Mussi M (2007). New and past geochemical data on fresh to brine waters of the Salar de Atacama and Andean Altiplano, northern Chile.. GEOFLUIDS, vol. 7, p. 33-50, ISSN: 1468-8115, doi: 10.1111/j.1468-8123.2006.00159

37. S. Lugli, M. A. Bassetti, V. Manzi, M. Barbieri, A. Longinelli, M. Roveri (2007). The Messinian ‘Vena del Gesso’ evaporites revisited: characterization of isotopic composition and organic matter. In: Geological Society of London.

Evaporites through Space and Time. vol. 285, p. 179-190, LONDON:Geological Society, London, doi: 10.1144/SP285.11

38. Mancini M., D'Anastasio E., Barbieri M., De Martini P.M. (2007). Geomorphological, paleontological and $^{87}\text{Sr}/^{86}\text{Sr}$ isotope analyses of early Pleistocene paleoshorelines to define the uplift of Central Apennines (Italy). QUATERNARY RESEARCH, vol. 7, p. 487- 501, ISSN: 0033-5894, doi: 10.1016/j.yqres.2007.01.005

39. Piscopo V, M. Barbieri, Monetti V, Pagano G, Pistoni S, Ruggi E, Stanzione D (2006). Hydrogeology of thermal waters in Viterbo area, central Italy.. HYDROGEOLOGY JOURNAL, vol. 14, p. 1508-1521, ISSN: 1431-2174, doi: 10.1007/s10040-006-0090-8

40. D'orefice M, Graciotti R, Capitano F, Stoppa F, Rosatelli G, M. Barbieri (2006). Il vulcanismo medio-pleistocenico dell'Appennino Laziale-Abruzzese: dalle peculiarità scientifiche agli aspetti applicativi. MEMORIE DESCRITTIVE DELLA CARTA GEOLOGICA D'ITALIA, vol. LXXII, p. 1-66, ISSN: 0536-0242

41. Quattrocchi F, M. Barbieri, Bencini R, Cinti D, Durocher K, Galli G, Pizzino L, Shevalier M, Voltattorni N (2006). Strontium isotope ($^{87}\text{Sr}/^{86}\text{Sr}$) chemistry in produced oilfield waters. The IEA Weyburn CO₂ monitoring and storage project.. In: LOMBARDI S.; ALTUNINA K.L.; BEAUBIEN S.E.. Advances in Geological Storage of Carbon dioxide.. p. 243-259, Springer Netherlands, doi: 10.1007/1-4020-4471-2_20

42. Scarascia-Mugnozza G., Petitta M., Bianchi Fasani G., Esposito C., Barbieri M., Cardarelli E. (2006). The importance of the geological model to understand and predict the life span of rockslide dams: the Scanno Lake case study, Central Italy. ITALIAN JOURNAL OF ENGINEERING GEOLOGY AND ENVIRONMENT, vol. Special Issue 1, p. 127-131, ISSN: 1825-6635, doi: 10.4408/IJEGE.2006-01.S-17 [con allegato e copyright]

43. Marco Petitta, Maurizio Barbieri, Lucia Mastroiillo, F Nardoni, M Tallini (2006). Aquifer protection zones in urban areas (Rome, central Italy): from definition to monitoring. Di -. p. 1-15, doi: 10.1144/EGSP22.I

44. Barbieri M., Boschetti T., M. Petitta, Tallini M. (2005). Stable isotopes (^2H , ^{18}O and $^{87}/^{86}\text{Sr}$) and hydrochemistry monitoring for groundwater hydrodynamics analysis in a karst aquifer (Gran Sasso, Central Italy). APPLIED GEOCHEMISTRY, vol. 20, p. 2063-2081, ISSN: 0883-2927, doi:

10.1016/j.apgeochem.2005.07.008

45. Barbieri M., Summa G. (2005). Caratterizzazione idrogeochimica e rapporti isotopici $^{87}\text{Sr}/^{86}\text{Sr}$ nelle acque del distretto vulcanico del Monte Vulture (Basilicata): implicazioni idrogeologiche.. *GIORNALE DI GEOLOGIA APPLICATA*, vol. 2, p. 459-466, ISSN: 1826-1256, doi: 10.1474/GGA.2005-02.0-67.0093

46. Barbieri M., Cavarretta G, Spadoni M, Voltaggio M, Zampetti G. (2005). Caratterizzazione idrogeochimica e ambientale delle acque di scorrimento superficiale della provincia di Rieti.. p. 25-47, RIETI:Assessorato Ambiente

47. Cortecchi Gianni, Tiziano Boschetti, Mario Mussi, Christian Herrera Lameli, Claudio Mucchino, Maurizio Barbieri (2005). New chemical and original isotopic data on waters from El Tatio geothermal field, northern Chile. *GEOCHEMICAL JOURNAL*, vol. 39, p. 547-571, ISSN: 0016-7002, doi: 10.2343/geochemj.39.547

48. Boschetti T, Venturelli G, Toscani L, M. Barbieri, Mucchino C. (2005). The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO₄ waters with high Na/Cl and low Ca/SO₄ ratios.. *JOURNAL OF HYDROLOGY*, vol. 307, p. 270-293, ISSN: 0022-1694, doi: 10.1016/j.jhydrol.2004.10.015 [con allegato e copyright]

49. Palombo M.R., Filippi M.L, Iacumin P, Longinelli A, Barbieri M, Maras A. (2005). Coupling tooth microwear and stable isotope analyses for palaeodiet reconstruction: the case study of Late Middle Pleistocene *Elephas* (*Palaeoloxodon*) antiquus teeth from Central Italy (Rome area).. *QUATERNARY INTERNATIONAL*, vol. 126-128, p. 153-170, ISSN: 1040-6182, doi: 10.1016/j.quaint.2004.04.020

50. Matano F., Barbieri M., Di Nocera S., Torre M. (2005). Stratigraphy and strontium geochemistry of Messinian evaporite-bearing successions of the southern Apennines foredeep, Italy: implications for the Mediterranean “salinity crisis” and regional palaeogeography. *PALAEOGEOGRAPHY PALAEOCLIMATOLOGY PALAEOECOLOGY*, vol. 217, p. 87-114, ISSN: 0031-0182, doi: 10.1016/j.palaeo.2004.11.017

51. Scarascia Mugnozza G., Petitta M., Bianchi Fasani G., Esposito C., Barbieri M., Cardarelli E. (2004). The importance of the geological model to understand and predict the life span of rockslide dams: the Scanno Lake case study, Central Italy. . In: Abdrakhmatov k., Evans S.G., Hermanns R.,

- Scarascia Mugnozza G, Strom A.L. eds.. Proceedings “Security of natural and artificial rockslide dams”. Bishkek, Kyrgyzstan, , June 2004, p. 157-163
52. Melluso L., Barbieri M., Beccaluva L. (2004). Chemical evolution, petrogenesis, and regional chemical correlations of the flood basalt sequence in the central Deccan Traps, India. *JOURNAL OF EARTH SYSTEM SCIENCE*, vol. 4, p. 587-603, ISSN: 0253-4126
53. Bassetti M.A., Manzi V., Lugli S., Roveri M., Longinelli A., Ricci Lucchi F., Barbieri M. (2004). Paleoenvironmental significance of Messinian post-evaporitic lacustrine carbonates in the northern Apennines, Italy. *SEDIMENTARY GEOLOGY*, vol. 172, p. 1-18, ISSN: 0037-0738, doi: 10.1016/j.sedgeo.2004.07.004
54. Barbieri M., Morotti M. (2003). Hydrogeochemistry and strontium isotopes of spring and mineral waters from Monte Vulture Volcano, Italy.. *APPLIED GEOCHEMISTRY*, vol. 18, p. 117-125, ISSN: 0883-2927, doi: 10.1016/S0883-2927(02)00069-0
55. Pizzino L., Cinti D., M. Barbieri, Gaggi G., Voltattorni N., Quattrocchi F. (2003). The October 31 (Ml 5.4) and November 1 (Ml 5.0) Molise earthquake (southern Italy): first results from geochemistry.. *GEOPHYSICAL RESEARCH ABSTRACTS*, vol. 5, ISSN: 1029-7006
56. Barbieri M., D’amelio L., Desiderio G., Marchetti A., Nanni T., M. Petitta, Rusi S., Tallini M. (2003). Gli isotopi ambientali (2H , 18O e $87\text{Sr}/86\text{Sr}$) nelle acque sorgive dell’appennino abruzzese: considerazioni sui circuiti sotterranei negli acquiferi carbonatici.. In: 1° convegno AIGA, Chieti, febbraio 2003. vol. 1, p. 69-81, ISBN: 8886698402
57. Lazzari E., Boschetti T., Mussi M., M. Barbieri, Cortecci G. (2003). An isotopic study of the El Tatio geothermal system, northern Chile.. In: *GEOITALIA*, 4° Forum FIST. p. 453-454
58. Lazzari E., Boschetti T., Mussi M., M. Barbieri, Cortecci G. (2003). The Salar de Atacama, northern Chile: chemical and isotopic compositions of lagunas and streams.. In: *GEOITALIA*, 4° Forum FIST. p. 455-456
59. Peccerillo, M. R. Barberio, G. Yirgu, D. Ayalew, M. Barbieri, T. W. Wu. (2003). Relationships between mafic and peralkaline silicic magmatism in continental rift settings: a petrological, geochemical and isotopic study of the Gedemsa volcano, Central Ethiopian Rift. *JOURNAL OF PETROLOGY*, vol.

- 44, p. 2003-2032, ISSN: 0022-3530, doi: 10.1093/petrology/egg068
60. Barbieri M., Barbieri M., Doreface M., Graciotti R., Stoppa F. (2002). Il Vulcanismo monogenico medio-pleistocenico della conca di Carsoli (L'Aquila).. *GEOLOGICA ROMANA*, vol. 36, p. 13-31, ISSN: 0435-3927
61. Barbieri M. (2002). The use of $^{87}\text{Sr}/^{86}\text{Sr}$ isotopic ratios as an environmental tracer: An example of the application to the Fossil Forest of Dunarobba (FFD) sedimentary system near Avigliano Umbro (Terni - Central Italy).. *APPLIED GEOCHEMISTRY*, vol. 17, p. 1543-1550, ISSN: 0883-2927, doi: 10.1016/S0883-2927(02)00047-1
62. M. Barbieri, Quattrocchi F., Bencini R., Cardellini C., Chiodini G., Cinti D., Galli G., Granieri D., Pizzino L., Voltattorni N. (2002). Analyses of the $^{87}\text{Sr}/^{86}\text{Sr}$ ratio in the Weyburn oil waters.. Technical Report.. p. 1-8
63. Galli G., Pizzino L., Pongetti F., Quattrocchi F., M. Barbieri (2002). WP7: Geochemical transients, Second year CORSEIS INGV Technical Report.. p. 1-13
64. N Calanchi, A Peccerillo, CA Tranne, F Lucchini, PL Rossi, P Kempton, M Barbieri, TW Wu (2002). Petrology and geochemistry of volcanic rocks from the island of Panarea: implications for mantle evolution beneath the Aeolian island arc (southern Tyrrhenian sea). *JOURNAL OF VOLCANOLOGY AND GEOTHERMAL RESEARCH*, vol. 115, p. 367-395, ISSN: 0377-0273, doi: 10.1093/petrology/egg068
65. Dall'aglio M., Barbieri M., Venanzi G., Bazzoli P. (2001). Drinking Water Quality in the Grosseto Province, Tuscany, Italy. An appraisal on the basis of the study of water rock interaction. In: 10th International Symposium on Water-Rock Interaction. VILLASIMIUS, ITALY, 10-15 Giugno 2001, vol. 2, p. 1059-1062, A A BALKEMA PUBLISHERS, SCHIPHOLWEG 107C, PO BOX 447, 2316 XC LEIDEN, NETHERLANDS
66. M. Barbieri, Barbieri M., Dallaglio M. (2001). Caratterizzazione idrogeologica e idrogeochimica delle acque sotterranee del Lazio settentrionale mediante lo studio della distribuzione degli elementi in traccia e gli isotopi dello stronzio.. In: *GEOITALIA*, 3° Forum FIST. p. 297-298
67. Quattrocchi F., M. Barbieri, Pik R., Pizzino L., Guerra M., Scarlato P., Angelone, Conti A., Marty B., Sacchi E., Zuppi G.M., Lombardi S. (2000). Geochemical changes at the Bagni di Triponzo thermal spring during the Umbria – Marche 1997 – 1998 seismic sequence. *JOURNAL OF*

SEISMOLOGY, vol. 4, p. 567-587, ISSN: 1383-4649, doi:
10.1023/A:1026590028678

68. Bozzano F.M., Marcoccia S., M. Barbieri (1999). The role of calcium carbonate in the geomechanical behaviour of Pliocene lacustrine deposits.. QUARTERLY JOURNAL OF ENGINEERING GEOLOGY, vol. 32, p. 271-289, ISSN: 0481-2085, doi: 10.1144/GSL.QJEG.1999.032.P3.06

Maurizio Barbieri