





PERSONAL INFORMATION

Massimo Spadoni



-  Embassy of Italy, 50 E Chandragupta Marg, New Delhi (India)
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-  newdelhi.scienza@esteri.it
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-  Skype [ecogeochemistry.com](https://www.skype.com/people/ecogeochemistry.com)

Sex Male | Date of birth 25/05/1966 | Nationality Italian

WORK EXPERIENCE

1 Jul 2016–Present

Scientific Attaché

Embassy of Italy, 50 E Chandragupta Marg, New Delhi (India)

Support and development of bilateral cooperation between Italy and India; promotion of the Italian scientific and technological system.

Business or sector Science Diplomacy

3 Sep 2007–30 Jun 2016

Senior Researcher

CNR - Istituto di Geologia Ambientale e Geoingegneria via Salaria km 29.300, 00010 Montelibretti - Roma (Italy) <http://www.igag.cnr.it/>

Research in the field of environmental geochemistry, isotope geochemistry and geochemical mapping

Business or sector Scientific Research

Oct 2005–Feb 2009

Contract Professor

Università di Roma "La Sapienza", Roma (Italy)

Appointed for the course of "*Thematic Mapping and GIS*" for the Master Degree in "*Geology Applied to Engineering and Land Planning*" (Geologia Applicata all'Ingegneria e alla Pianificazione Territoriale)

Business or sector Education

Oct 2003–Feb 2009

Contract Professor

Università di Roma "La Sapienza", Roma (Italy)

Appointed for the course of "*Informatics Applied to Geology*" (Applicazioni Informatiche) for the Bachelor's Degree in "*Geological Sciences*" (Scienze Geologiche)

Business or sector Education

Oct 2003–Feb 2009

Contract Professor

Università di Roma "La Sapienza", Roma (Italy)

Appointed for the course of "*Thematic Mapping and GIS*" for the Master Degree in "*Geological Surveys and Cartography*" (Prospezioni geologiche e Cartografia)

Business or sector Education

- 22 Dec 2000–2 Sep 2007 **Junior Researcher**
 CNR - Istituto di Geologia Ambientale e Geoingegneria at Università "La Sapienza" - Dept. of Geochemistry - P.le A. Moro 5, 00185 Roma (Italy) <http://www.igag.cnr.it/>
 Research activity in the field of Environmental Geochemistry and Geochemical Mapping with applications in Geographic Information Systems (GIS) and Geostatistics
Business or sector Scientific Research
- 18 Dec 1995–16 Dec 2000 **Junior Researcher**
 Istituto Sperimentale per lo Studio e la Difesa del Suolo, Rieti (Italy)
 Geochemistry of soils, pedology, soil mapping
Business or sector Scientific Research
- Jun 1994–Sep 1994 **Professional contract**
 Terza Università di Roma, Roma (Italy)
 Geological survey aimed to the protection of the Peschiera Spring area, Latium, Italy (Rilevamento Geologico finalizzato alla Salvaguardia delle Sorgenti del Peschiera). Public-private collaboration project.
Business or sector Scientific and Applied Research
- Jun 1996–Jun 2016 **Geologist and Consultant**
 Professional activity
 Various activities as a professional geologist and/or consultant in the field of applied geology, applied geophysics and land planning.
Business or sector Professional, scientific and technical surveys

EDUCATION AND TRAINING

- 18 May 1993 **Master degree in Geological Sciences, summa cum laude**
 Università di Roma "La Sapienza", Roma (Italy)
 Geology, hydrogeology and structural geology
- Sep 2002 **Advanced study course on Isotope Hydrology**
 CNR - Institute for Geosciences and Earth Resources, Pisa (Italy)
 Isotope hydrology
- Oct 2002 **Advanced study course on "River Basin Management for Flood Risk Mitigation"**
 Department of Civil Engineering – The University of Birmingham, Birmingham (United Kingdom)
 Hydrology and mitigation of flooding hazard
- Mar 2002 **Course "Introduction to ArcGIS for ArcView and ArcInfo - Part I & II"**
 CNR - Centro di Studio per il Quaternario e l'Evoluzione Ambientale
 Thematic mapping and geographical database by using Geographic Information Systems (GIS)

- Jun 2002 **Course on "Earth Vision and the WorkFlow manager (WMFI)"**
CNR - Centro di Studio per il Quaternario e l'Evoluzione Ambientale
Digital 3D modeling applied to geological environments
- May 1996 **Advanced study course on "GIS applied to Soil Mapping"**
Istituto Sperimentale per lo Studio e la Difesa del Suolo, Catanzaro (Italy)
Geographic Information Systems (GIS), pedology
- May 1996 **Advanced study course on "Experimental Design and Analysis of Variance"**
Istituto Superiore di Sanità, Roma (Italy)
Statistics
- Jun 1995 **Advanced study course on "Land and environmental planning"**
Università di Roma "La Sapienza", Roma (Italy)
Land planning
- May 1995 **Professional Qualification as Geologist**
Università di Roma "La Sapienza", Roma (Italy)
Applied geology
- Jan 1995 **Advanced study course on "Environmental and land Ecology"**
Università di Roma "La Sapienza", Roma (Roma)
Land ecology

PERSONAL SKILLS

Job-related skills

Statistics and Geostatistics

- Univariate and multivariate analysis of geochemical datasets
- Geostatistical analyses of geographic variables
- Spatial analyses and spatial statistics in a GIS environment
- Sampling design and techniques

Mapping and geomodeling

- Implementation of Geographic Information Systems and related applications
- Modeling of geographic data and relational database design
- 2D e 3D (DTM) data analyses and modeling
- Network and Raster data analyses
- Spatial distribution of geochemical variables (geochemical mapping);
- Soil and geological mapping
- Stereoscopic aerial photo interpretation
- Fuzzy mapping

Geochemical Laboratory

- Geochemical analyses on soil, rock and water samples
- Gas chromatography
- Gamma ray spectrometry

- Alpha spectrometry
- Gas analyses through Quadrupolar Mass Spectrometry (QMS)
- Isotope analyses of Sr, Nd and Fe through Thermal Ionization Mass Spectrometry (TIMS)

Survey in field

- Geological survey and mapping of geological structures
- Soil survey
- Seismic microzonation survey
- Measurement of gas concentration and fluxes in/from soils
- Measurement of concentrations and fluxes of radon in the environment
- Gamma ground spectrometry
- Geochemical surveys

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital competences

Statistics e Geostatistics - advanced skills; Remote sensing - advanced skills; Database - advanced skills; Spreadsheets - advanced skills; Database (logical structure implementation) - advanced skills; Plots and mapping - advanced skills; Graphics - good; Geographic Information Systems (GIS) - advanced skills

ADDITIONAL INFORMATION

Publications on Peer Reviewed Journals (last 10)

- Voltaggio M., Spadoni M., Carloni S., Guglietta D. (2016) 212Pb as tracer for PM deposition on urban vegetation. *Science of the Total Environment*, 569–570, 9–15.
- Voltaggio M., Spadoni M., Sacchi E., Sanam R., Pujari P.R., Labhasetwar P.K. (2015) Assessment of groundwater pollution from ash ponds using stable and unstable isotopes around the Koradi and Khaperkheda thermal power plants (Maharashtra, India). *Science of the Total Environment*, 518-519, 616-625.
- Voltaggio M., Spadoni M. (2015) Intermittent flow regime of water/gas emissions as sinkhole trigger in alluvial plains: a study case at S. Vittorino plain (Rieti, Italy). *Environmental Earth Sciences*, 74, 1319-1329.
- Spadoni M., Voltaggio M., Sacchi E., Sanam R., Pujari P.R., Padmakar C., Labhasetwar P.K., Wate S.R. (2014) Impact of the disposal and re-use of fly ash on water quality: the case of the Koradi and Khaperkheda coal power plants (Maharashtra, India). *Science of the Total Environment*, 479-480, 159-170.
- Voltaggio M., Spadoni M. (2013) Determination of 222Rn in water by absorption in polydimethylsiloxane mixed with activated carbon and gamma-ray spectrometry: An example application in the radon budget of Paterno submerged sinkhole (Central Italy). *Applied Geochemistry*, 34, 65-74.
- Spadoni M., Voltaggio M. (2013) Contribution of gamma ground spectrometry to the textural characterization and mapping of floodplain sediments. *Journal of Geochemical Exploration*, 125, 20–33.
- Di Felice P., Spadoni M. (2012) MAHA: A comprehensive system for the storage and visualization of subsoil data for seismic microzonation. *Computers & Geosciences*, 54, 113-121.
- Voltaggio M., Spadoni M. (2011) Direct determination of half-life of 214Pb by gamma spectrometry and comparison with previous indirect measurements. *Applied Radiation and Isotopes*, 69, 705-710.

Spadoni M., Brilli M., Giustini F., Petitta M. (2009) - Using GIS for modelling the impact of current climate trend on the recharge area of the S. Susanna spring (Central Apennines, Italy). *Hydrological processes*, 23, 50-64. DOI: 10.1002/hyp.7452.

Voltaggio M., Spadoni M. (2009) – Mapping of H₂S fluxes from the ground using copper passive samplers: an application study at the Zolforata di Pomezia degassing area (Alban Hills, Central Italy). *Journal of Volcanology and Geothermal Research*, 179 (1-2) 56-68.

Publications as Conference Proceedings (last 10)

Voltaggio M., Spadoni M., Sacchi E., Sanam R., Pujari P.R., Labhasetwar P.K. (2015) Use of stable and unstable isotopes to study the effect of the disposal of fly ash on the pollution of shallow groundwaters: the example of the Koradi and Khaperkheda thermal power plants (Maharashtra, India). *International Symposium on Isotope Hydrology*, Vienna, 11-15 May 2015. Book of extended synopses, poster session 2, 129-130.

Spadoni M., Voltaggio M. (2013) Contribution of gamma ground spectrometry to the textural characterization and mapping of floodplain sediments. 9° Encuentro del "international Centre for Earth Sciences", 22 - 25 Oct. Malargue (Mendoza - Argentina).

Spadoni M., Voltaggio M. (2012) Use of passive accumulators made of polydimethylsiloxane mixed with activated carbon for the determination of ²²²Rn in water: potential applications for geochemical surveys and hydrogeology. 8° Encuentro del "international Centre for Earth Sciences", 30th Oct - 2nd Nov Mar del Plata (Argentina), 83.

Giaccio B., Sacchi E., Spadoni M., Vallone R., Voltaggio M. (2012) Water resources: a geochemical approach to their characterization and sustainable use. *The Sixth National Conference on Science and Technology*, Sept. 25-27, Kathmandu (Nepal), 291-292.

G. Ranfone, M. Spadoni, P. DiFelice (2011) Web-GIS per l'interrogazione guidata di dati geologico-tecnici per la microzonazione sismica. *Atti 15a Conferenza Nazionale ASITA - Reggio di Colomo* 15-18 novembre, 1815-1824.

Spadoni M. (2010) Modelling the impact of climate trends on aquifer recharge using GIS and stable Hydrogen and Oxygen isotopes. *Proceedings of the Indo Italian Workshop on Impact of Climate Change and Anthropogenic Activities on Soil and Water Resources*, October 22-24, Roorkee (India), pp. 53-58.

Spadoni M. (2010) Application of hydrological GIS and stable Hydrogen and Oxygen isotopes to model aquifer recharge. *Proceedings of the Indo Italian Workshop on Sustainable Development of Ground Water Resources*, Editors: Labhasetwar P., Pujari P.R., Spadoni M., October 20, Nagpur (India), pp. 15-21.

Spadoni M. (2010) Mapping techniques for soil gas concentrations and fluxes. *Sino-Italian Workshop on CO₂ Sequestration*, December 2010, Beijing (China), only oral presentation.

Spadoni M., Voltaggio M. (2010) Environmental geochemistry and geochemical mapping as support to land planning and public health protection: case histories in Italy. *Proceedings of the International Conference on Environmental Health and Technology*. March 15-17, Kanpur (India), pp. 97-99.

Spadoni M., Voltaggio M. (2010) Environmental geochemistry and geochemical mapping as support to land planning and public health protection: case histories in Italy. *International Conference on Environmental Health and Technology*, Book of Abstracts, March 15-17, Kanpur, India, 97-99.

Publications as technical report (most relevant 5)

Spadoni M. (2009) Specifiche tecniche per le funzionalità del sistema informativo. Con il contributo di: F. Brammerini, A. Lacchini, G. Naso, A. Pagliaroli. Progetto URBISIT CNR-DPC, Report 4.3a.

Spadoni M. (2008) Criteri e linee guida per la realizzazione della banca dati finalizzata alla microzonazione sismica. Progetto URBISIT CNR-DPC, Report 4.2a.

Voltaggio M. Spadoni M. (2006) Studio dei prodotti di radiolisi su cementi destinati all'immobilizzazione di rifiuti radioattivi tipo MTR. *Convenzione SOGIN – CNR*.

Spadoni M., Voltaggio M. (2006) - Aggiornamento e analisi bibliografica dei dati relativi alla mineralogia, petrografia e geochimica delle rocce costituenti le formazioni interessate dal tracciato della galleria – mineralizzazioni contenenti metalli pesanti. *Convenzione CNR – Società RFI dal titolo "Studio geologico strutturale, mineralogico, geochimico e mineralurgico delle formazioni attraversate dalla galleria Musinè-Gravio ai fini della valutazione e della riduzione dei rischi amianto e da metalli pesanti s.l. (linea ad Alta Capacità Torino-Lione)"*.

Spadoni M., Voltaggio M. (2004) - Caratterizzazione geochimico-ambientale dell'area di cava di Monte Beni in rapporto all'impiego geotecnologico di fanghi di lavorazione provenienti dalla cava di Sasso di Castro. Nell'ambito dell'omonima convenzione CNR – Consorzio CAVET.

Publications of Maps

Cavuoto G., Mancini M., Spadoni M. (2009) Carta delle indagini. Progetto di "Microzonazione sismica per la ricostruzione dell'Aquila" – Macroarea 5 "Località: ONNA. Dipartimento Nazionale Protezione Civile & CNR-IGAG. http://www.protezionecivile.it/cms/view.php?dir_pk=395&cms_pk=17213.

Cavuoto G., Mancini M., Spadoni M. (2009) Carta geolitologica. Progetto di "Microzonazione sismica per la ricostruzione dell'Aquila" – Macroarea 5 "Località: ONNA. Dipartimento Nazionale Protezione Civile & CNR-IGAG. http://www.protezionecivile.it/cms/view.php?dir_pk=395&cms_pk=17213.

Cavuoto G., Mancini M., Spadoni M. (2009) Carta delle microzone omogenee in prospettiva sismica. Progetto di "Microzonazione sismica per la ricostruzione dell'Aquila" – Macroarea 5 "Località: ONNA. Dipartimento Nazionale Protezione Civile & CNR-IGAG. http://www.protezionecivile.it/cms/view.php?dir_pk=395&cms_pk=17213.

Raglione M., Spadoni M., Lorenzoni P., Febelli C. (2002) Carta dei Suoli dell'Altopiano di Leonessa e delle loro Idoneità per Alcune Colture Tipiche (Cartografia Pedologica, 1 sheet). Regione Lazio - Istituto Sperimentale per lo Studio e la Difesa del Suolo.

Publications as Book chapter

Barbieri M., Cavarretta G., Spadoni M., Voltaggio M., Zampetti G. (2003) - Caratterizzazione Idrogeochimica e ambientale delle acque di scorrimento superficiale della provincia di Rieti. In: Stato dell'Ambiente, Conoscenza Agenda 21, Obiettivi e Indicatori Condivisi, Provincia di Rieti, 104pp.

Cavarretta G., Spadoni M., Voltaggio M., Zampetti G. (2003) – Indagine sui flussi di Radon dal suolo in un'area selezionata della Provincia di Rieti: uno strumento per la individuazione delle aree a potenziale rischio da Radon (Radon Prone Areas). Stato dell'Ambiente, Conoscenza Agenda 21, Obiettivi e Indicatori Condivisi, Provincia di Rieti, 104pp.

Spadoni M. (2002) Terminillo, Il Canto della Terra - Geologia e Idrogeologia. In: Cammerini G., Ferri E., Marinelli R., Guida dei Monti Reatini, Amministrazione Provinciale di Rieti, 22- 31.

Publications of databases (logical and physical structure)

MAHA – Microzonation and Hazard Database – (2009) Coordinamento scientifico: Spadoni M., Naso G., Brammerini F.; Modello Concettuale: Spadoni M.; Sviluppo software Pennica F., Marconi F., Faraday s.r.l.. Progetto URBISIT, CNR-DPC. Pubblicata on-line presso: <http://150.146.31.48/microzonazione/#>

GeoQuick - Software application developed in Access for the storage and the management of geochemical data on soils, waters, stream sediments and rocks (2002). This application has been presented at the "Seventh International Symposium on Environmental Issues and Waste Management in Energy and Mineral, Cagliari, Ottobre 2002, poster session.

ESBase 2001 – Software application developed in Access for the management of soil databases according to the guidelines provided by the European Soil Bureau (2001). This application has been presented during the International Conference on 'Sustainable Soil Management for Environmental Protection Soil Physical Aspects', Firenze, 2-7 luglio 2001, poster session, and freely distributed to many universities, research Institutes and professionals.

Web sites

Scientific coordinator and responsible for the web site: www.tecoproject.eu

Dedicated to the EU-India Project "Technological Eco - Innovations for the Quality Control and the Decontamination of Polluted Waters and Soils"

Scientific coordinator and responsible for the web site: www.indoitalianresearch.eu

Dedicated to the "Indo-Italian Centre of Excellence on Environmental Sustainability" that was established after the Memorandum of Understanding for Scientific Cooperation signed by the "National Environmental Engineering Institute" (CSIR-NEERI, India) and "Dipartimento di Scienze del Sistema Terra e Tecnologie per l'Ambiente" (CNR, Italy)

International activities: EU-INDIA
PROJECTS

Project Manager

EU action: *Technological eco-innovation for the quality control and the decontamination of polluted waters and soils*

EuropeAid/135-474/DD/ACT/IN, 'EU-India Research and Innovation Partnership'. Value of the action: 438,041 €

Project partners and associates:

- CNR - Consiglio Nazionale delle Ricerche (National Research Council of Italy)
- National Environmental Engineering Institute (NEERI) of the Indian Council of Scientific & Industrial Research (CSIR)
- The European Technology Platform for Water (WssTP)
- European Business Group
- Ministry of Environment and Forests of India

International activities: INDIA
(before July 2016)

2015, July

Submission, as scientific coordinator, of the project "*Study and assessment of the environmental impact of coal mines, thermal power plants and ash ponds for the smart planning of large cities in India using a geochemical approach*" within the CNR-CSIR Scientific Cooperation Agreement.

2015, April

Coordination of the TECO project Kick-off meeting: "*Strategies of TECO Project and start up of the exchange programme*" NEERI - Nagpur - 20th April 2015.

Meeting at "CSIR - Council of Scientific and Industrial Research" headquarter in Delhi with the Director General Dr. M.O. Garg, in collaboration with the scientific office of the Embassy of Italy.

Meeting and collaboration agreement with Dr. Poul Jensen, Director of the European Business and Technology Centre in New Delhi.

2013, March to Present

Scientific Coordinator of the *Indo-Italian Centre of Excellence on Environmental Sustainability* (www.indoitalianresearch.eu), based on the Memorandum of Understanding for Scientific and Technological Cooperation between "National Environmental Engineering Institute" (CSIR-NEERI, India) and "Department of Earth System Science and Environmental Technologies" (CNR - Dipartimento di Scienze del Sistema Terra e Tecnologie per l'Ambiente, Italy).

2014, March

Gamma survey of the Koradi ash pond area, within the CNR-CSIR Scientific Cooperation Agreement.

2013, March

Organizing Secretary of the workshop "*Technological Solutions for Environmental Sustainability*", India - Nagpur (Maharashtra) – National Environmental Engineering Research Institute in collaboration with the Italian Embassy in New Delhi.

2012 - 2014

Member of the research group on: "*Assessment of environmental hazard and groundwater vulnerability from ash ponds using stable and unstable isotopes*". Project approved under CNR (Italy) - CSIR (India) Scientific Cooperation Agreement between the "Institute of Environmental Geology and Geoengineering" (Rome, Italy) & the "National Environmental Engineering Research Institute" (Nagpur, India).

2010, November

Organizing Secretary of the Indo Italian Workshop on "*Impact of Climate Change and Anthropogenic Activities on Soil and Water Resources*", India - Roorkee (Uttar Pradesh) – Department of Hydrology – IIT Roorkee, in collaboration with the Embassy of Italy in New Delhi.

2010, October

Organizing Secretary of the Indo Italian Workshop on "*Sustainable Development of Ground Water Resources*", Nagpur (Maharashtra - India) – National Environmental Engineering Research Institute, in collaboration with by the Embassy of Italy in New Delhi.

2010, March

Participation as a speaker to the International Conference on "Environmental Health and Technology", Indian Institute of Technology, Kanpur (India).

2006

Drafting of the project "Development of ecologically sustainable farming practices through the activities of Community-Managed Resource Centres for the improvement of rural livelihoods in Tamilnadu State (India)" in collaboration with ASIA Onlus e Myrada organization (Tamil Nadu - India).

2003 - 2004

Member of an Indo-Italian working group for the study of "New Approaches to the Knowledge, Conservation and Sustainable Management of Ethno-Ecological Networks: the Sacred Groves in Eastern India". In collaboration with the Centre for Interdisciplinary Studies (www.cintdis.org), Kolkata (West Bengal - India).

International Activities:
ARGENTINA

2014 - Present

Member of the project: "Remote sensing technologies applied to the management of natural and cultural heritage in sites located in Italy and Argentina. Risk monitoring and mitigation strategies". Preliminary study of the Payunia volcanic field area (Province of Mendoza). Geo-archaeological survey of the neolithic sites in south Patagonia.

Project funded by the Italian Ministry of Foreign Affairs (MAE - Project of Great Relevance). Coordinated by Dr. Rosa Lasaponara, CNR IMAA - Potenza, in partnership with the Comisión Nacional de Actividades Espaciales (CONAE) - Buenos Aires.

2013 - Present

Member of the start-up group of the high altitude laboratory (*Laboratorio de Altura*) in the mountain of Famatina, province of La Rioja, under the coordination of Dr. José Ruzzante head of the Earth Science programme of the Comisión Nacional de Energía Atómica (CNEA) and in collaboration with the university of Chilechito.

2013 - 2014

Scientific coordinator (Italian side) of a research group between Italy (CNR) and Argentina (University of Mendoza) on the bioremediation of contaminated soils and waters culminated with the submission of a "Priority Project" (Grande Rilevanza) of the Italian Italian Ministry of Foreign Affairs entitled: "Estudio de factores bio-geoquímicos en el desarrollo de una planta depuradora vegetal innovadora destinada a suelos y aguas contaminadas con metales pesados, radionucleidos e hidrocarburos".

2013 - Present

Collaboration with the Italian Group of the ICES - International Centre for Earth Sciences and planning of shared research activities in the field of environmental radiochemistry, in close collaboration with Dr. Dario Torres, Scientific Director of ICES - Argentina Malargue, under the coordination of the Comisión Nacional de Energía Atómica (CNEA).

2012 - Present

Participation to the research project "Utilización de sistemas biológicos de acumulación de metales pesados y radioisótopos como biorremediadores en pasivos ambientales mineros del centro oeste argentino", funded by the Ministerio de Ciencia y Técnica (approval FONTAR/2012 n. 009), in collaboration with the Universidad Nacional de Cuyo and the private company GT INGENIERIA S.A.

2011 - 2014

Activities linked to the development of Italian-Argentine scientific networks in collaboration with the Scientific Attaché of the Italian Embassy, Dr. Gabriele Paparo.

2011 - 2013

Scientific Coordinator (Italian side) of the project "Riesgos Hidrogeológicos en un sector del Litoral del Río De La Plata"- In collaboration with the Universidad Nacional de La Plata (Argentina).

Project of researcher exchange funded by the Italian Italian Ministry of Foreign Affairs (MAE). Argentine group coordinated by Prof. Jeronimo Ainchil, Universidad Nacional de La Plata (Argentina).

2013

Participation as a speaker to the 9° "Encuentro del International Centre for Earth Sciences", 5th-8th Nov Malargue (Mendoza - Argentina).

2012

Participation as a speaker to the 8° "Encuentro del International Centre for Earth Sciences", 30th Oct - 2nd Nov Mar del Plata (Argentina).

International Activities: CHINA

2014, May

Submission of the EU-Project "*Technological and methodological innovations for the management and the protection of water, soil and forest resources at a regional watershed level*" within the 'EU-China Research and Innovation Partnership programme and in collaboration with the Chinese Academy of Science, the National Observatory of Athens, the European Union of Chamber of Commerce in China and the China-Europe Water Platform. The project passed the first selection step.

2010 - 2013

Scientific coordinator of the research group on: "*CO2 geological sequestration: geochemical techniques for the storage, safety and monitoring verification at the selected sites*". Project approved under CNR (Italy) - CAS (China) bilateral Programme between Institute of Environmental Geology and Geoenvironment (Rome, Italy) & Institute of Geology and Geophysics (Beijing, China).

2010 - 2012

Scientific coordinator of the project "*CO2 geological sequestration: geochemical techniques for the storage, safety and monitoring verification at the selected sites*", in collaboration with the Chinese Academy of Science.

Project funded by the Italian Ministry of Foreign Affairs (MAE - Project of Great Relevance). The Chinese research group is coordinated by Prof. Zhonghe Pang, Institute of Geology and Geophysics – Chinese Academy of Science.

2011

Field surveys for the identification of soil gas background around a geothermal power plant in the urban area of Tianjine.

2010

Organizing secretary of the "*Sino-Italian Workshop on CO2 Sequestration*", between CNR and the Institute of Geology and Geophysics of the Chinese Academy of Science, Beijing, PR China December 2010.

International Activities:
MADAGASCAR

2012, December

Visiting professor holding a series of seminars on "Gechemical Mapping" at the *Institute et Observatoire Geophysique d'Antananarivo*, University of Antananarivo, for the master study course in Geophysics.

2012, December

Field surveys for the assessment of water quality in the area of Antananarivo.

2011 - 2015

Within the TRIL programme of the The Abdus Salam International Centre for Theoretical Physics

Supervisor of the following PHD thesis within the TRIL (Training and Research in Italian Laboratories) programme of the The Abdus Salam International Centre for Theoretical Physics (Trieste), funded by UNESCO:

- "*Hydrogeophysical characterization of aquifers in three towns of south Betsioky (Madagascar)*"

- "*Apport de la prospection électrique et de la teledetecion a l'etude hydrogeologique de la region Analamanga (Madagascar)*"

- "*Geoelectrical exploration of Ambovombe sedimentary basin hydrogeological structure, in the south extreme part of Madagascar*"

In collaboration with Prof. Jean Bruno Razimbazafy of the *Institute et Observatoire Geophysique d'Antananarivo* (IOGA)

2011, July

Visiting professor holding a series of seminars on "Geographic Information Systems and Geostatistics" at the *Institute et Observatoire Geophysique d'Antananarivo*, University of Antananarivo, master study course in Geophysics.

Main active research lines at CNR

Migration and Geochemistry of Natural and Artificial Radionuclides in Soils and Waters. Under the scientific coordination of Dr. Mario Voltaggio.

Geochemical surveys and mapping. Under the scientific coordination of Dr. Mario Voltaggio.

Main participations to International Conferences (last 5)

2015 - International Symposium on Isotope Hydrology: Revisiting Foundations and Exploring Frontiers. International Atomic Energy Agency, May 11–15 Vienna, Austria.

2012 - The Sixth National Conference on Science and Technology, Sept. 25-27, Kathmandu (Nepal).

2011 - 15th ASITA (Federazione Italiana della Associazioni Scientifiche per le Informazioni Territoriali e Ambientali) National Conference, Parma, Nov. 15-18.

2009 - 6th European Congress on 'Regional Geoscientific Cartography and Information Systems', München.

2006 - "TerraMadre" – world meeting of Food Communities. Italian delegate for CNR – IGAG. Torino.

Other activities related to University Teaching

Seminars

2002/3 and 2003/4 - Seminar cycles on "Geographic Information Systems and Statistics Applied to Land Processes", within the Course of "Applied Geostatistics" hold by Prof. G. Raspa for the Bachelor Degree in "Environmental Geology", Sabina Univesitas Rieti - Università "La Sapienza" di Roma.

2003 - Seminar on "Soils and Palaeosols in Quaternary Geology", within the course of "Quaternary Geology" hold by Prof. G.P. Cavinato for the Master Degree in Geological Sciences, Terza Università di Roma.

Tutoring activities

Supervisor for the following Master Degree theses:

- *Misure di spettrometria gamma su suoli tra Fiano Romano e Poggio Mirteto (Lazio settentrionale) per una zonazione dei flussi di Radon attraverso l'integrazione di metodi di laboratorio (University "La Sapienza" – Roma - 2003).*

- *Misure di spettrometria gamma e radiometria nel settore orientale dei Monti Sabatini (Lazio settentrionale): zonazione dei flussi di radon integrata da misure di concentrazione di radon all'interno degli edifici (University "La Sapienza" – Roma - 2004).*

- *Ricostruzione dell'evoluzione quaternaria del bacino di Rieti mediante l'impiego di tecniche GIS e ricostruzione di un modello 3D del sottosuolo (Terza Università – Roma - 2005).*

- *Caratterizzazione isotopica delle acque del M. Terminillo – Rieti (University "La Sapienza" – Roma - 2006).*

- *Archiviazione ed interrogazione guidata di dati geologico-tecnici per la Microzonazione Sismica in una base di dati spaziale (University of L'Aquila – Study course in "Engineering and Informatics")*

1998

Tutor in the course "Introduction to Pedology", Istituto Sperimentale per lo Studio e la Difesa del Suolo - Regione Lazio.